

GENERAL BALTO KHAIL INFORMATION

Balto Khail is located in the Shamali Plain, 12km away from Charikar, on its Eastern side. The village is found in the vicinity of Panjsheer and Ghorband rivers junction. Due to its location on a small hill, the lower part of the village is characterised by intensively irrigated lands while the upper part has to face problems regarding access to water.

There are 220 households living in the village. The household average size is 6,4 which is smaller than the two other villages assessed in the region. The people living in Balto Khail are Tadjiks and speak Dari.

Average Household Size	
Rich	
Medium	6.4
Poor	6.3
All Households	6.4

Transportation and access

The main accessible market is in Sayed, 3 km far away from Balto Khail. It takes about two hours to reach the bigger market of Charikar by foot. Car transportation is possible at certain periods of the year on a monthly basis and is expensive.

There is one primary school in Sayed as well, which is accessible only for boys.

As regard the health facilities, there is a Basic Health Centre in Sayed and a hospital in Charikar. It takes about 30 minutes to reach the BHC.

The community categorized households into three different wealth groups, or socio-economic categories. 65% of the population living in the village has been categorized as being poor while 32,5% are considered as being medium and only 2,5% as being rich. Each wealth group has been characterised by the following features:

Better Off Households (2,5%):

Only one person in the village was mentioned as being rich. He was described as being a businessman having shops in Charikar and Kabul and exporting grapes.

Medium Households (32,5%):

An average medium household has 2-3 Jeribs of land and owns 4 livestock. These households are generally skilled workers working for example as carpenters in the bazaar.

Poor Households (65%):

An average poor person has 1 to 2 Jeribs of land and owns 2 livestock, including at least 1 cow. The poor persons that have no access to land are used to work in their neighbours' land and get in exchange harvest for their own consumption.

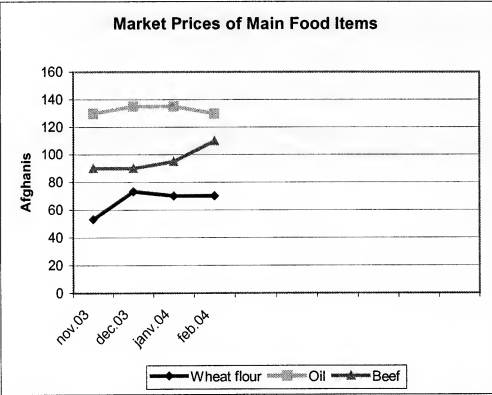
FOOD SECURITY – BALKO KHAIL

Markets and Market Price Indicators:

Location of Market	Time taken to reach market		Cost of getting to market (Afs)	Market Accessible in winter and Spring
	Vehicle	Foot/animals		
Sayed	10 minutes	30 minutes	-	Yes
Charikar	Less than 1 hour	2 hours	Vehicle: 40 afghanis Animals: 200 afghanis	Market accessible in winter by foot

The main market accessible for Balto Khail population is located in Sayed. It takes about 30 minutes to reach this market which is accessible the whole year. From time to time, people from Balto Khail go to Charikar in order to find some items non available in Sayed market. It takes about 2 hours by foot or animal and less than

1 hour by vehicle to reach Charikar. It costs 200 afghanis to use the animal option and 60 afghanis to use vehicle option. The transport frequency by vehicle is once per month, but the road conditions make it difficult to reach Charikar by car during the winter period.



MARKET PRICES IN SEYAD

Since these datas have not been collected prior to the interview period, these have more an indicative purpose than an explanatory capability.

Households in the Balto Khail area rely on Seyad market for purchase of very few food items. They mainly purchase wheat grains and oil from the market, and when affordable, some families will purchase meat.

Based on the data in the graph on the left, the prices of oil were fairly constant between the period of November 2003 to February 2004. The price of wheat flour increased significantly between November and December. As regard beef, the price of 1 kg increased significantly between December and February, thus reducing meat accessibility during the peak of the winter.

DIETARY DIVERSITY

Dietary diversity is a primary component of food security. Previous studies have shown that dietary habits in Afghanistan are not very diverse and consequently people are at risk of micronutrient deficiency disorders and related diseases. In order to better understand the quality of diets in the last four months, surveyors asked about the frequency of eating foods from different food groups.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households combined. The data shows that on average medium and poor households are only eating protein rich foods, such as meat, milk-related products and pulses once a month or less. They are however, getting protein from eggs, which they eat on average about 2 times a month and on a daily basis from cereals (wheat and barley). Because this data does not reveal information on sufficiency of protein intake, it is hard to assess whether there is inadequate protein intake. It is however highly unlikely, based on the frequency of consumption of complementary sources (pulses or barley) or sources which are complete proteins (meat and milk-related products) that households are eating enough to be meeting adequate protein requirements.

Wealth Group	Meat	Milk, Yoghurt Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other vegetables	Fruits	
Better Off	3	2.9	2.3	3.5	6	2.9	2.9	1 = Never Eat
Medium	2.2	1.9	3.0	2.8	5.5	3.3	1.6	2 = Once a month or less
Poor	2.5	2.2	2.8	3.0	5.7	3.2	2.1	3 = 2 to 3 times a month
All Households								4 = Once weekly
								5 = Twice weekly
								6 = 3 to 5 times weekly
								7 = Always

CROP PRODUCTION

Rural and semi-rural areas in Afghanistan are still highly dependant on subsistence agriculture for their own consumption, thus monitoring annual crop yields and amount planted can help predict the food security situation of households. The main food staple grown in Balto Khail is irrigated wheat. Beside that, barley, rice, potatoes and pulses have been planted and harvested.

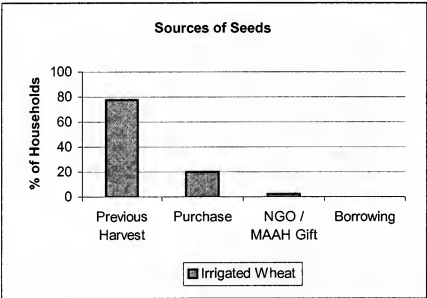
The average amount of irrigated wheat harvested per household for the 2003 harvest season was 83 seers (1 seer = 7 kg), while the amount of barley harvested amounts to 39,6 seers. Amongst these landowners, 87,5% were able to plant irrigated wheat after the harvest on an average of 2,7 Jeribs of land while the average amount of barley planted was 0,74 Jerib.

The amount of average wheat harvest in Balto Khail could be enough to cover basic food needs for most of the winter. However, when taking into consideration the land distribution inequality, one must say that only

medium and rich landowners (35% of the total population) were able to cover their needs. Moreover, the increase of wheat prices in the local market might have stimulate local farmers to sell a part of their wheat production thus reducing furthermore their food self-sufficiency. The datas found below on yield kept corroborate this hypothesis.

	Irrigated wheat	Rainfed wheat	Barley	Rice	Potatoes	Pulses
Average amount of land sown (jeribs)	2.7	0	0.74	0.25	0.03	0.14
Average harvest (seers)	83.47		39.6	25	5.8	4.9

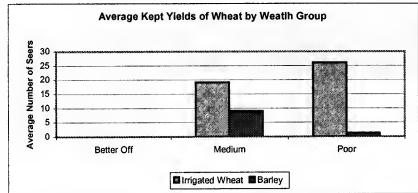
Amongst the households that planted seeds, 77,5% of them got seeds from their previous harvest, while 20% had to purchase them. This indicates that a majority of the population could cover their food needs during year 2003 without having to dig into their seeds stocks.



Beside that, people from Balto Khail are used to cultivate fruit trees, mainly mulberries, almonds, apricots and pomegranates. They do cultivate grape vines as well. Except for mulberries and grapes, the other fruits production is exclusively intended for their own consumption.

Yield kept

The informations collected reveal that the average amount of wheat that have been kept at the time of the interview was 19,1 seers per medium households while poor households kept an average of 26 seers. This difference could be explained by the fact that medium households have a better income diversity and therefore were confident enough to sell more agricultural products in the local market in order to earn some cash.



As regard barley, medium household kept an average of 9 seers while poor households kept on average 1,25 seers.

FOOD SECURITY PERCEPTION

Household perception of food security is an important indicator of current food security status. In Balto Khail, 42,5% of the population considered the food situation to be worse than 4 months ago while 37,5% expected the food situation to be worse in the four coming months. This proportion is confirmed by the households enumerators.

PERCEPTION OF FOOD SECURITY INDICATORS

	Percentage out of 40 households
Consider food situation to be worse in comparison to 4 months ago	42.5%
Consider food situation to be worse than one year ago	22.5%
Considered food situation not to be sufficient at time of survey	-
Worried where their food was coming at the time of survey	40%
Expect the food situation to be worse in the next 4 months	37.5%
Enumerators thought households did not have enough food for the next 4 months	37.5%

CONCLUSION: CURRENT FOOD SECURITY STATUS

It is presumable that the amounts of harvest will not be enough to cover the food needs of most of the families until next harvest. Indeed, since the interview period took place two months after the harvest, the small amount of wheat and barley that the population had still kept at that time of the year is probably not sufficient for living during the whole winter. Amongst other things, the next data collection round will therefore be used to confirm these suppositions and to focus on the coping strategies that Balto Khail population used in order to cover their food needs during this period.

Moreover, given the gap between the average harvest and the yield kept two months later, it is presumable that farmers did sell some wheat in the local market and that they were stimulated to continue on when looking at wheat prices increase in the local market. If this is the case, the amount of wheat owned for their own consumption did furthermore decrease and thus their self-sufficiency.

Dietary diversity is a concern for this population. The magnitude of the impact of having a low quality diet on disease and mortality and therefore economic productivity is still not entirely clear, but needs to be further explored. Education on dietary diversity, particularly with a focus on how to ensure access to all essential nutrients using local foods could help improve the quality of people's diets.

RISKS TO LIVES - BALTO KHAIL

Mortality Indicators:

The crude mortality rate (CMR) of 1.17 is above the emergency threshold rate of 1.0 deaths/ 10,000 people / day. Compared to the other villages surveyed, the mortality indicator is higher. The under-5 mortality rate of 4.35 is far above the emergency threshold rate of 2.0 deaths/ 10,000 people / day and is much higher than the two other villages surveyed (2,35 for Khalo Zai and 2,97 for Gholback).

Forty-eight percent of all female deaths of childbearing age in Afghanistan are attributed to complications during pregnancy or childbirth. Additionally, newborns only have a 25% chance of survival, if their mothers die at birth; most die within the first month due to malnutrition.¹ Because of this high rate of maternal and child mortality in Afghanistan, this study also looked at the number of children who had a skilled birth attendant present at delivery as a proxy for risk to lives of both the mothers giving birth and the new infants. In Moi Mubarak area, none of the children born in the last four month had a skilled birth attendant present at birth.²

Morbidity Indicators:

The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under 5 in Balto Khail was extremely high, with 70,3% of them having been concerned during the two weeks prior to the survey. The presence of 8,1% of children under five having bloody diarrhoea is of great concern as well.

¹ (MoH Afghanistan/UNICEF/CDC, 2002)

² Because this question was only asked to female caregivers who had birthed a child in the last four months, it did not include stillbirths or children who had died during the last four months, so there actually may have been more births in the site in the last four months.

RISKS TO LIVES INDICATORS	% (Number / Total Number)
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10 000 / day)	1.17
Under 5 mortality in last 4 months (Deaths / 10 000 / day)	4.35
Births in last 4 months attended by a Skilled Birth Attendant	0
Morbidity Indicators	
Children < 5 years with watery diarrhoea	70.3
Children < 5 years with bloody diarrhoea	8.1
Children < 5 with ARI	48.6
Children between 6 and 59 months with measles vaccination	83.8
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate)	13.5
Children between 6 months and 59 months with Oedema	7.1
Children between 6 and 59 months with severe acute malnutrition	7.1
Children between 6 and 59 months with moderate acute malnutrition	6.4
Children between 1 year and 59 months with a MUAC under 13.5 cm	13.5
Children between 1 year and 59 months with a MUAC under 12 cm	8.1
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm	12.7
Reproductive age women (15-49 years) with a MUAC < 21.0 cm	0
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt)	2.5

CHILDREN NUTRITIONAL STATUS³:

A screening of the selected households, based on weight for height measurement percentage of the median and MUAC, did detect high levels of malnutrition amongst the children between 6 and 59 months. 13,5% of children between 6 and 59 months were suffering from global acute malnutrition. Amongst them, it has been reported by the screeners that 7,1% were showing oedema signs which is a symptom of severe acute malnutrition. However, a field visit done in the spring didn't confirm the existence of these oedema signs even though the children concerned were nonetheless showing malnutrition signs. The figures concerning severe acute malnutrition should therefore be considered with high suspicion while the figures of global acute malnutrition are most probably conform to the reality.

ADULT WOMEN NUTRITIONAL STATUS:

Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. In Balto Khail, 12,7% of women have a MUAC below 23 cm, which indicates that these women may be at-risk of malnutrition. There has been recorded with a MUAC under 21cm.

MICRONUTRIENT DEFICIENCIES:

The presence of iodized salt in the house is a proxy for the use of it and also therefore of iodine deficiency.

Only 2,5% of the households had iodized salt. This is particularly worrying, given that iodine deficiency in women of childbearing age is of grave concern due to the effects on the developing foetus. Children of iodine-deficient mothers may be born with varying degrees of cretinism and development problems, both physical and mental. A nutritional survey done by ACF in March-April 2003 in Parwan and Kapisa provinces found alarming rates of goitres among the population. 64.7% of mothers were found to have a visible goitre, resulting from iodine deficiency, while 78.2% of the families had one or more visible goitre case in the family.

Health Facilities

The table below lists the health services or facilities that are available to the people in Balto Khail. A Basic Health Centre is available in Seyad, 30 minutes far away by foot. This BHC is held by Emergency NGO and do deliver some drugs but are not able to take in charge malnutrition cases. They do provide transportation to carry on sick people to Charikar hospital when needed. A Comprehensive Health Centre is available in Bagram, 1,5 hours far away by foot. There is a hospital available in Charikar as well as a Therapeutic Feeding Centre held by ACF. It takes about 2 hours by foot to reach Charikar and 30 minutes by car.

	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts	None				
Basic Health Centre	Seyad	30 minutes	-	Everybody	Yes

³ The percentages mentioned below were used for convenience only and do not have a statistical significance. Samples are indeed too small to draw immediate conclusions on prevalence. These figures only show trends setting for longer term understanding of the health and nutrition situation in this area.

Comprehensive Health Centre	Bagram	1 to 2 hours	-	Everybody	Yes
Hospital	Charikar	2 hours	100 afs	Everybody	Yes
Traditional healers/Birth Attendants	None				
Skilled birth attendant	None				
Private doctor	None				

WATER SOURCES:

The Shamali plain is irrigated by two rivers taking their origins in the Northern mountains: the Panjsheer river and the Ghorband river. Since Balto Khail is located nearby the junction of both rivers, the lower side of the village has to suffer from lands flood while the upper side cannot benefit from the huge amount of water available because no proper irrigation system does exist. For drinking water, the population uses the water found in the various channels. It was reported that the quantity of water available has increased in 2003 when compared to the previous year.

SANITATION FACILITIES:

It has been reported that everybody has a private vault latrine in his house. People from the village do built as well other latrines for the guests.

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
Spring	Less than 1 hour	Same	Increased

RISK TO LIVES - CONCLUSION

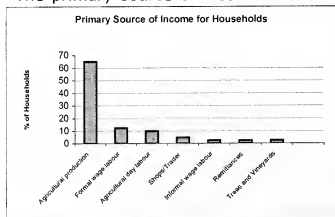
The high mortality and malnutrition rates observed in Balto Khail cannot be attributed to a sudden phenomenon that would have affected this population during a specific period of time. The children showing Oedema signs were reported to be in the same nutritional situation for already more than one year. As regard mortality cases, the villagers mentioned that such a big amount of deaths was not something particularly unusual. The global health situation of this population seems therefore to rely much more on structural problems than on contingent ones.

Given the relatively good dietary diversity of households in Balto Khail, the alarming levels of severe malnutrition in this sentinel site compared to the two other villages could be explained by a lack of drinking quality water access. This would be compatible with the high levels of reported watery diarrhea amongst the under 5 years old children. The malnourished children's mothers reported that they couldn't take their children to Therapeutic Feeding centres in Charikar since it was requested for them to stay there for a few weeks. They mentioned that they couldn't afford such a constraint since they had in charge other children.

LIVELIHOOD SECURITY – BALTO KHAIL

INCOME SOURCES:

The primary source of income for the vast majority of households in Balto Khail during the period of July to



October 2003 was agricultural crop production. 65% of the households were relying on this income source. Amongst the poor category of the population, 69,2% did mention it as being their first income sources while 53,8% of the medium category mentioned it as being their most important income source. 12,5% of the households were relying on formal wage labour and 10% on agricultural day labour.

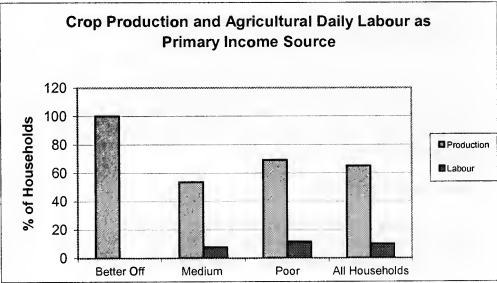
Almost all interviewed households could benefit from sources of income coming from their crop harvest. 3/4 of the population had livestock products as income sources while about 50% of the households were selling fruit trees' products, such as dry mulberries and mulberries' powder and grapes. About half of the population could work on other lands in order to receive either a part of the harvest or some cash. This type of activity did concern to the same extent the medium category and the poor category of local inhabitants. Significantly, 47,5% of the households did take out a loan during the four months prior to the survey. Even though no informations are available on the

	Percent of households with Income Source	Percent of Households with Income Source earned by women
Agricultural Production	92.5	0
Livestocks	77.5	0
Trees and Vineyards	50	0
Take out loan	47.5	0
Agricultural day labour	45	0
Formal wage labour	25	0
Shops/trader/own business	15	0

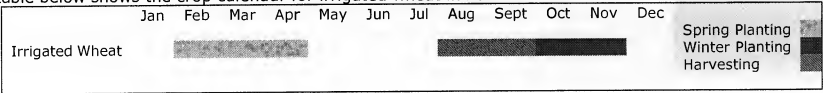
purpose of these loans, it is presumable that the food needs were amongst the main reasons for taking these loans. Anyway, indebtedness should be considered as a hindering factor towards autonomy and self-sufficiency.

CROP PRODUCTION AND AGRICULTURAL DAILY LABOUR

When looking at the proportion of households who did mainly benefit from crop production compared to agricultural day labour, it is significant that agricultural day labour is not an important source of income in the area. However, 45% of the households mentioned it as being an income source but to an extent that do not enable them to rely on such an activity. The main reason given for it was that they are very few rich families who can afford to pay workers



The table below shows the crop calendar for irrigated wheat in Balto Khail.



Crop Production Livelihood Assets: Land Ownership and Draft Oxen

100% of the households do own irrigated land with an average amount of 2,7 jerib per household. 61,5% of the households own one or more oxens.

	All Households	Rich	Medium	Poor
Households owning land (%)	100			
Average amount of land owned (jeribs)	2.7			
Households owning irrigated land (%)	100			
Average amount of irrigated land owned (jeribs)	2.7			
Households owning rainfed land (%)	0			
Average amount of Rainfed land owned (jeribs)	0			
Households with land access reduced to mortgage or sale (%)	10.3			
Households owning one or more draft oxen (%)	61.5			
Draft Oxen Killed or sold in Last 4 months (number)	1			

Shocks to Agricultural Yields

Altogether, 43,2% of the households producing wheat had between 20 to 50% of their crops destroyed. None of the households interviewed had more than 50% of crop destroyed. The main reason behind that was a disease affecting the wheat. It was reported that the wheat became dry, yellow and this disease was propagating itself (name of the disease in dari: chalchala). The fact that different crops were significantly affected increases the overall food insecurity of the households.

	Households with between 20 and 50% of crop destroyed (%)	Households with more than 50 % of crop destroyed (%)	Reasons behind crop destruction
Irrigated Wheat	43,2	-	Other
Barley	-	-	
Rice	-	-	
Fruit trees	-	-	

LIVESTOCK

None of the households interviewed had their primary source of income from livestock and livestock products in the four months prior to the interview. The datas collected reveal indeed a very small amount of livestock owned by the households. The most widely owned animal is the cow whose milk production is mainly used for personal consumption. Nonetheless, people who

own cows do sell a small proportion of their livestock products in the local market. 60% of the households do own oxen for agricultural purposes.

	Goats	Sheep	Draft Oxen	Bulls	Cows	Donkeys
Households with Asset (%)	2.5%	2.5%	60%	10%	70%	35%
Average number Owned	1	2	1.7	1.0	1.9	1.5

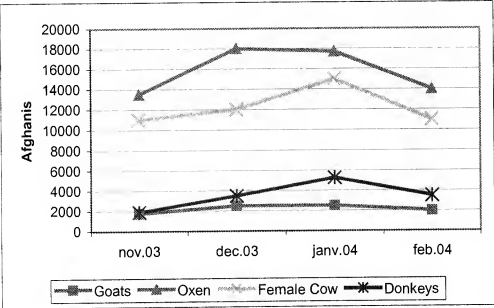
Livestock disease

When asked about the current disease status of their livestock, the male village leaders noted that 100% of their cattle and oxens have been affected by foot and mouth disease, and that 20% of them died from this disease in the last four months. Foot and mouth disease seems to be a major concern for the three villages assessed in the area. It is however highly unlikely that 100% of these animals suffered from foot and mouth, but is likely that foot and mouth is a serious problem that should be further investigated.

Even though foot and mouth is rarely a deadly disease, it has a tremendous contagious power and affect the vitality of the contaminated animals. This disease has therefore not a direct impact on decapitalisation but given the impact it has on productivity, it should be considered as a strong hindering factor towards better agricultural production and self-sufficiency.

Livestock owners in Balto Khail have not had their animals vaccinated and thus their livestock are at risk of suffering from disease outbreak. Veterinary services are available in Charikar but it was reported that the cost of vaccination was too high to be afforded.

	Cattle and Oxen (% affected)	Sheep and Goats (% affected)
Foot and Mouth	100%	--



Livestock Prices

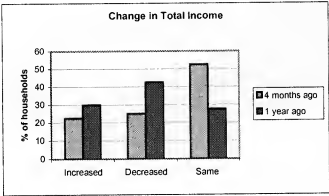
Livestock prices through the latter part of 2003 and at the very beginning of 2004 showed no significant trends. The price of oxens, sheep and goats gradually increased from November until January before decreasing in February. It is however difficult to understand such changes in prices and it is likely that this was due to seasonal demand more than anything else.

Handicrafts

No handicrafts activities as income sources have been mentioned by the interviewed households

CAPACITY TO COPE: COPING STRATEGIES

The graph on the right shows that 42.5% of households thought that their total income had decreased compared to the previous year while for the same period, 30% thought it had increased. Compared to the prior 4 months, 25% of the households thought their total income has decreased while 22.5% thought it had increased.



Coping strategies - non-erosive and erosive

The list of coping strategies is by no means inclusive of all the strategies households invoke in order to weather tough times, instead it focuses on the behaviors found to be predictive of declining livelihood and food security in Afghanistan that can easily be measured. The list has been divided into erosive and non-erosive coping strategies in order to understand the impact on a household's future livelihood security. The division is not mutually exclusive as the loss of a bicycle, motorcycle or car may impact future livelihood opportunities. Additionally, the order of the list does not reflect a continuum of behavior representing a worsening situation. Finally, the coping strategies listed below are meant to be general indicators of a worsening situation, although admittedly they will also be capturing the chronically and transitory poor households who engage in these activities on a normal basis.

Non-erosive coping strategies

In order to cope with their declining livelihood, 22.5% of the households were concerned by the migration of at least one of their members in order to find job opportunities. The most common migration destinations were Kabul, Pakistan and Iran. 7.5% of them did send their sons to work as indentured labour. 32.5% of them have engaged in the selling of non-productive assets such as bicycles, carpets and house parts (windows, doors, etc...) in order to cover their expenses.

82.5 % of the households did borrow food from their relatives in order to make a meal. This indicates a strong solidarity pattern amongst the village which is corroborated by the fact that these populations are used to practice zaqat, but in the same time it indicates regular and worrying lack of access to food.

Erosive and distress coping strategies

Besides the usual coping mechanisms put into place to face daily expenses, a certain number of households have engaged in behaviours that are likely to be erosive to future livelihood possibilities. Even though Balto Khail population did not take food on credit, 47.5% of the population did take out a loan, increasing their indebtedness and creating therefore further constraints on their immediate future.

	% (Number / Total Number)
Non-Erosive Coping Strategies (last four months)	
Household member migrated for labour	22.5
Begging	0
Sons sent to work as indentured labour	7.5
Household members worked more hours to make daily expenses	40
Households who borrowed food from relatives in order to make a meal	82.5
Sold Carpet / Gillims from the house	7.5
Sold house furniture	0
Sold house part (windows, doors, roofbeams)	7.5
Sold bicycle	17.5
Sold jewelry	0
Sold motorcycle / car	0
Consumption of dried bread	2.5
Erosive Coping Strategies	
Household took out loan	47.5
Household sold or mortgaged land, house or shop	0
Households who took food on credit from local shop	0
Sold sewing machine	15
Sold loom	2.5
Sold handcart	0
Sold grinder	0
Sold tractors / combine / agricultural machinery	0
Marry daughter early	0
Send son to military	0

CAPACITY TO COPE: RISK AND VULNERABILITY

Households with diverse income sources are better able to cope with covariate and idiosyncratic shocks than those who rely on only one or two income sources. Said differently, the more varied the sources of income, the easier households can deal with and recover from unexpected shocks.

Even though households in Balto Khail have a relatively good amount of sources of income, they mainly rely on agricultural production, having therefore a high dependence on agriculture related income sources and therefore are particularly vulnerable to covariate risk. Alternative livelihood options that do not have the systemic risk involved with agriculture production would reduce the risk of being impacted by subsequent years of poor climatic conditions.

Average Income Diversity Score	
Better Off	4
Medium	4.31
Poor	3.69
All households	3.9

CONCLUSION

The agricultural situation of Balto Khail population is hindered by water accessibility even though water availability is far from sufficient. The topography of this area makes it impossible for farmers to collect the water available in order to irrigate the arable lands. Agricultural production is therefore seriously limited and thus people are at risk of not being able to meet their basic food needs. Amongst the coping strategies used, beside borrowing food, migration and indebtedness are the most common strategies.

The nutritional and health status of this population is alarming. The high rate of malnutrition amongst the under 5 years old children could be attributed to poor drinking water quality even though structural factors should better be able to explain the roots of malnutrition in this area. A therapeutic feeding centre is available in the area, but access and constraints implied by the feeding procedure make it difficult for the concerned families to visit these centres.

The main things revealed by the November 2003 data collection are the following ones:

- Access to irrigation water is a problematic issue
- Drinking water quality is a concern amongst the population
- The amount of wheat harvested will surely not be able to cover the villages needs until next harvest
- Dietary diversity is quite poor
- Even though we cannot mention any decapitalisation of livestock, foot and mouth disease seems to be endemic in the area, thus hindering the agricultural production
- An agricultural disease called "chalchala" is a major concern for agricultural crop production
- Agricultural day labour is not a common income source because they are very few rich families who can afford to pay workers
- Mortality and malnutrition rates are alarming and seem to rely on structural factors
- Iodine deficiency is a great concern since goiter is a widespread problem along Parwan province

Opportunities for Supporting Socially – Acceptably Livelihood Outcomes

Capital Base	Asset	Means	Group	Livelihood Outcome*
Physical	Livestock	Veterinary Services – through MAAH or private - vaccinations	Livestock Owners	Healthier Livestock
	Irrigation - Channels digging	Food –for -Work	Households in need of safety net	Improved agricultural production
	Irrigation - Drainage	Food - for - Work	All	Improved agricultural production
	Desinfectant de la terre			
Human	Human Health	Supplementary feeding centre	Children	Reduced risk of mortality for children

PARWAN PROVINCE SUMMARY OVERVIEW

Parwan Province is a rural province mainly located in the Shamali Plain, North of Kabul. This plain which is a little undulating lies at around 2000 meters high and is surrounded by mountains. There are two main rivers irrigating the Province, Panjsheer river and Ghorban river. A complex irrigation system has been built that should allow the whole Province to cultivate mainly irrigated wheat. Charikar is the official Province center. This region has been heavily affected by the war between the Talebans and the Tadjiks, being at the frontline of the various battles.

AGRO-ECOLOGICAL ZONES

It has been decided to divide Parwan Province in three different agro-ecological zones

Zone 1: Irrigated Land with heavy water access - location in plain: Balto Khail

Zone one encompasses villages which are located East of Charikar. These villages have enormous amount of water due to the fact that they are situated on the lower side of Shamali plain and are irrigated by both the Panjsheer river and the Ghorband river. Their main income sources are constituted by agricultural production. Balto Khail, the sentinel site that has been chosen, is located 12km away from Charikar, on its Eastern side. The village is found in the vicinity of Panjsheer and Ghorband rivers junction. Due to its location on a hillside, the lower part of the village is characterised by intensively irrigated lands while the upper part has to face problems regarding access to water. There are 220 households living in the village which are Tadjiks and speak Dari. The average number of persons living in each household is 6,4.

Zone 2: Irrigated Land with poor access to water - location in plain: Khalo Zai

Zone two covers the Western part of the Shamali plain (West from Charikar). This zone faces problems of water access which are caused by their location in the upper side of the plain. Non agricultural daily labour in the nearby cities is the main source of income for these populations. Khalo Zai is located 13 km on the South-Western side of Charikar, 3 km away from the main road Kaboul-Mazar-e-Sharif. The people from Khalo Zai are in their vast majority Pashto and speak Pashto. During the Talebans period, this village was located south of the former frontline, on Talibans side, whereas the neighbouring villages were located on the other side of the frontline, on Tadjik side. The village has been almost completely destroyed during the fighting period and the local population had to leave their village. Moreover, the region suffered from drought until last year. During 2002, the population came back in the village and since then, returnees are regularly coming back in their native village. It is a big village that can be separated in three different manteqas. Khalo Zai is the most populated village chosen in Parwan province with 850 households. The average number of persons living in each household is 7.

Zone 3: Irrigated Land - location in valleys: Gholback

Zone three covers the northern section of Parwan Province, a zone that lies in the Panjsheer's valleys. These villages are situated in sharp valleys and are irrigated by a river passing in the bottom of the valley. Their main income sources are constituted by agricultural production. Gholback is located in one of Panjsheer valleys, approximately 65 km North of Charikar and 25 km from Gulbahar. It is a village which lies on the two sides of a sharp valley with a river passing at the bottom of this valley. The upper side of the village is covered by houses while the lower side, near the river, is dedicated to agricultural lands. Due to their situation in stairs, the surface of each cultivated parcel is rather small, amounting on average to 1,8 Jerib. Many villages in the Panjsheer valleys do share the same basic characteristics as Gholback. They are 200 households living in Gholback which speak mainly dari and are of Tadjik origins. The average number of persons living in each household is 7,1.

FOOD AVAILABILITY

FOOD PRODUCTION

Even though year 2003 has been generally mentioned as being a better year than the previous years in terms of agriculture production, it is likely that the surveyed villages did not produce enough crop to guarantee their self-sufficiency until the 2004 harvest. Khalo Zai is a particular case since no land has been cultivated and this is mainly due to water access problems.

CROP PRODUCTION

The main food staple grown in Balto Khail and in Ghulback is irrigated wheat. Some barley, rice, potatoes and pulses have been planted and harvested in Balto Khail as well but to a much lesser extent. In Balto Khail, 100% of the households do own an average of 2,7 Jeribs of land. The average amount of irrigated wheat harvested per household for the 2003 harvest season was 83 seers (1 seer = 7 kg), while the amount of barley harvested



Parwan
Surveillance
Unit

National Surveillance System (NSS)

Transitional Islamic State of Afghanistan

Ministry of Rural Rehabilitation & Development, Ministry of
Agriculture & Animal Husbandry & Ministry of Health

Parwan
Province

KHALO ZAI

Fall 2003

What is the NSS?

The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs. The NSS aims to cover all 32 provinces, but currently during its pilot phase is active in seven provinces.

Methodology

The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the villages (rural areas) or other blocks / communities neighborhoods (urban and semi-urban areas) with respect to agro-ecological features, economic activities, available services, infrastructures and people in a given area.

Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel sites should be interpreted as only to represent each particular sentinel site. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same agro-ecological zone or similar blocks in an urban setting.

Analytical Framework

The data is organized into three categories for analysis and discussion, in order to use the information to inform policies and programs.

- Livelihood Security
- Food Security
- Risk to Lives

A description of each category is listed on the last page of the bulletin.

PARWAN PROVINCE

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Information for this report was collected in one survey that took place in november 2003. This survey is based on the standardized national food security and nutrition surveillance questionnaires. These questionnaires were targeted at both male and female focus groups as well at males and females households.

GENERAL KHALO ZAI INFORMATION

Khalo Zai is located in the Shamali Plain, North of Kabul, 3 km away from the main road Kabul-Mazar-e-Sharif, and 13 km on the South-Western side of Charikar, the Province's capital. The people from Khalo Zai are in their vast majority Pashto and speak Pashto. During the Talebans period, this village was located south of the former frontline, on Talibans side, whereas the neighbouring villages were located on the other side of the frontline, on Tadjik side. The village has been almost completely destroyed during the fighting period and the local population had to leave their village. Moreover, the region suffered from drought until last year. During 2002, the population came back in the village and since then, returnees are regularly coming back in their native village.

It is a big village that can be separated in three different manteqas. Khalo Zai is the most populated village chosen in Parwan province with 850 households. The household average size is 7 which is quite similar as the other villages assessed in the region. The population's compounds look big but there is nonetheless space problems linked to the fact that there is not enough rooms in it. People did construct such big compounds because they were used to have before their livestock inside, but there is now a shortage of livestock.

Average Household Size	
Rich	-
Medium	8
Poor	6.9
All Households	7

Transportation and access

Khalo Zai stands in the vicinity of Charikar (13 km away). It takes about two hours to reach Charikar by foot. Car transportation is possible once a week. However, since Khalo Zai lies nearby the main road leading to Charikar, people are used to walk until the main road in order to be picked up by cars or trucks.

There were no school building at the time of the survey. Teachers were nonetheless used to give lessons to boys and girls in the outskirt. The population mentioned the fact that a school was planned to be built in the near future.

This village has to deal with frequent arrivals of returnees. During the four months prior to the survey, 215 households came back to their native villages. Thanks to a good solidarity between the people, the returnees could live in their neighbours house during the time needed to build again their houses.

As regard the health facilities, there is a hospital in Charikar.

The community categorized households into three different wealth groups, or socio-economic categories. 90% of the population living in the village has been categorized as being poor while only 2,5% are considered as being rich. Each wealth group has been characterised by the following features:

Better Off Households (2,5%):

A rich person has 45-50 jeribs of land, have money and own shops. They have between 6 to 10 animals.

Medium Households (7,5%):

An average medium household has 10 to 15 jeribs of land and owns 3 animals

Poor Households (90%):

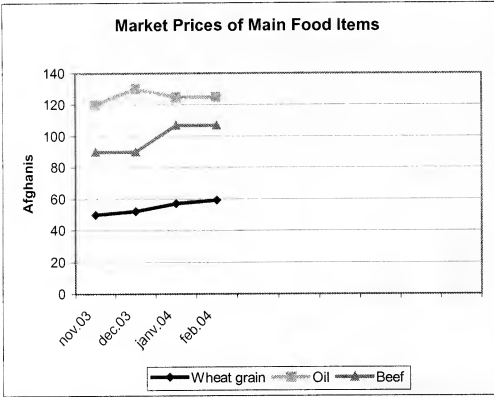
A poor person has 3 to 5 jeribs of land, very few livestock and rely on daily working.

FOOD SECURITY – KHALO ZAI

Markets and Market Price Indicators:

Location of Market	Time taken to reach market		Cost of getting to market (Afs)	Market Accessible in winter and Spring
	Vehicle	Foot		
Charikar	Less than 1 hour	1 to 3 hours	Vehicle: 60 afghanis Animals: 200 afghanis	Market accessible in winter

The main market accessible for Khalo Zai population is located in Charikar. It takes about 2 hours by foot or animal and less than 1 hour by vehicle. It costs 200 afghanis to use the animal option and 60 afghanis to use vehicle option. The transport frequency by vehicle is once per week. The market is accessible during the entire year.



MARKET PRICES

Since these data have not been collected prior to the interview period, these have more an indicative purpose than an explanatory capability.

Households in the Khalo Zai area rely on the Charikar market for purchase of very few food items. They mainly purchase wheat grains and oil from the market, and when affordable, some families will purchase meat.

Based on the data in the graph on the left, the prices of oil were fairly constant between the period of November 2003 to February 2004. During the same period, the price of local wheat grain (7 kg) increased a little bit. This can be attributed to the progressive decrease of total harvested wheat available in the region. This increase in wheat prices, even though not very significant, might however

have an impact on Khalo Zai population, since they cannot rely on their own wheat production. As regard beef, the price of 1 kg increased significantly between December ad January. It is very likely that this is a seasonal trend, but because the data are not available for previous years, it is not clear.

DIETARY DIVERSITY

Dietary diversity is a primary component of food security. Previous studies have shown that dietary habits in Afghanistan are not very diverse and consequently people are at risk of micronutrient deficiency disorders and related diseases. In order to better understand the quality of diets in the last four months, surveyors asked about the frequency of eating foods from different food groups. The table below reflects the average consumption of each of the following food item (excluding Ramadan and festivals times). The data shows that on average poor households, ie 90% of the population, are only eating protein rich foods, such as meat, milk-related products and eggs once a month or less. They are however, getting protein from pulses, which they eat on average about 2 to 3 times a month. Because this data does not reveal information on sufficiency of protein intake, it is hard to assess whether there is inadequate protein intake. It can be noted, however, that households do need a complementary protein source in addition to wheat in order to meet their full essential amino acid requirements. It is indeed highly unlikely that households are eating enough to be meeting adequate protein requirements.

Compared to the other sentinels sites in Parwan, Khalo Zai has a lower dietary diversity especially due to the fact thay they have a lesser consumption of the different food items. For instance, while Balto Khail and Gholback villages do eat meat 1 to 2 times a month, Khalo Zai population do eat meat once a month or less. The same pattern can be found with eggs and all the other food items listed below. Meat and to a lesser extent eggs being a preference food for people living in Afghanistan, these results indicate a lower food security level in Khalo Zai compared to the two other sites.

Wealth Group	Milk, Yoghurt Krut, etc		Green Leafy Vegetable		Other vegetables		Fruits
	Meat	Eggs	Pulses				
Medium	3	4	2.5	4.5	3.5		2
Poor	1.8	1.3	2.9	1.4	1.7		1.6
All Households	1.9	1.5	2.9	1.6	1.8		1.6

- 1 = Never Eat
- 2 = Once a month or less
- 3 = 2 to 3 times a month
- 4 = Once weekly
- 5 = Twice weekly
- 6 = 3 to 5 times weekly
- 7 = Always

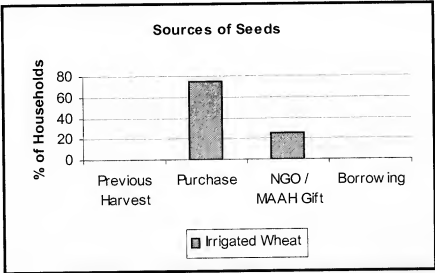
CROP PRODUCTION

Rural and semi-rural areas in Afghanistan are still highly dependant on subsistence agriculture for their own consumption, thus monitoring annual crop yields and amount planted can help predict the food security

situation of households. The main food staple grown in the Parwan Province is irrigated wheat and it is actually the only one grown in Khalo Zai.

Nonetheless, no wheat has been harvested in 2003. The main reason for that is due to the lack of water access, as it is explained in the livelihood security section.

As regard land sown, even though 90% of the population owns an average of 5,1 Jerib of irrigated land, only 10% of the population did actually plant seeds during the winter planting period. This is mainly due to the lack of livestock to plough the land and to the lack of seeds. Some families were able to rent tractors in order to plough their land. Amongst the households that were able to plant seeds, 75% of them had to purchase seeds while 25% get seeds from previous harvest. The economical constraints of the people and the perspective of not having enough water anyway could explain the small proportion of people who decided to purchase seeds.



FOOD SECURITY PERCEPTION

In Khalo Zai, the perception of the households interviewed was extremely dark. 92.5% of the population considered the food situation to be worse than 4 months ago while 70 % expected the food situation to be worse in the four coming months. This proportion is confirmed by the households enumerators.

PERCEPTION OF FOOD SECURITY INDICATORS

Consider food situation to be **worse** in comparison to 4 months ago
Consider food situation to be **worse** than one year ago
Considered food situation to not be sufficient at time of survey
Worried where their food was coming at the time of survey
Expect the food situation to be **worse** in the next 4 months
Enumerators thought households did not have enough food for the next 4 months

Percentage out of 40 households
92.5%
90%
-
45%
70%
70%

CONCLUSION: CURRENT FOOD SECURITY STATUS

The almost non existence of agricultural production and the household perceptions of their food security status clearly indicate a food insecurity situation. Water accessibility is the main factor that explains the lack of agricultural production. Due to its ethnic particularity, Khalo Zai had to face in the past tensions with the other surrounding villages which in turn induced limited access to water. The cohabitation process has improved during year 2003 and it is believed that the surrounding villages would agree to ease the water access of Khalo Zai. However, the water global access is at the moment constrained by lack of water availability which hinders the opportunity of Khalo Zai village to take advantage of the ethnic stabilization.

70% of the local population think that the food situation will be worse in the next 4 months. This indicates not only a huge concern about their opportunities to cultivate in the coming months but also a worry about their abilities to buy food on the local markets. As regard the prices of the food items during the months following the interviews, we can say that wheat grain prices have lightly increased. This trend has to be followed in order to understand the impact it could have on Khalo Zai population. Beside that, it has been reported that the main concern of the population was linked to a decrease of cash availability compared to the previous year. People from Khalo Zai were saying that, when coming back, they had brought with them money and assets that needed to be used and sold during 2003 year in order for them to buy sufficient food items. According to the population, this money and assets capital have been already almost entirely used. If this is indeed the case, it means that in the near future, the population will have to rely exclusively on the salaries earned by the people

working in the surrounding area and on the remittances sent by the persons who left the country to go to Pakistan or Iran.

Moreover, as it will be developed below, Khalo Zai village has to deal with a strong influx of returnees which in turn put pressure on their already limited access to food. A common solidarity pattern in the village implies that returnees are taken in charge when arriving by the already settled population. They can share their relatives houses and food. Since the priority of these returnees is to built again their houses that have been destroyed, we can presume that this category of population is not able the first 3 months to earn money from daily labour and therefore aggravate the financial constraints linked to food access.

Finally, dietary diversity remains a concern especially for medium and poor wealth groups. The magnitude of the impact of having a low quality diet on disease and mortality and therefore economic productivity is still not entirely clear, but needs to be further explored.

RISKS TO LIVES - KHALO ZAI

MORTALITY INDICATORS:

The crude mortality rate (CMR) of .95 is not above the emergency threshold rate of 1.0 deaths/ 10,000 people / day, but is high relative to the normal developing country level of .5 deaths /10 000 / day. Compared to the other villages in Parwan Province, the mortality indicator is lower. The under-5 mortality rate of 2.35 is above the emergency threshold rate of 2.0 deaths/ 10,000 people / day but is still lower than the two other villages visited.

MORBIDITY INDICATORS:

The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under 5 in Khalo Zai was 59,5% in the two weeks prior to the interview's date. The presence of 10.8% of children under five having bloody diarrhoea is of great concern. The huge amount of diarrheal diseases' cases that have been reported can be explained by the the poor water access in Khalo Zai village. Many of these cases of diarrheal disease could therefore be attributed to the poor water's quality. As regard the proportion of children suffering from ARI, it amounts to 32,4%. As regard.

RISKS TO LIVES INDICATORS		% (Number / Total Number)	CHILDREN STATUS ¹ :	NUTRITIONAL
Mortality Indicators			A screening of the selected households, based on weight fot height measurement percentage of the median and MUAC, did not detect any malnutrition cases amongst the children between 6 and 59 months.	
Crude mortality in last 4 months (Deaths / 10 000 / day)		.95		
Under 5 mortality in last 4 months (Deaths / 10 000 / day)		2.35		
Births in last 4 months attended by a Skilled Birth Attendant		0		
Morbidity Indicators			ADULT WOMEN NUTRITIONAL STATUS: Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. In Khalo Zai, 23,6% of women have a MUAC below 23 cm, which indicates that these women may be at-risk of malnutrition. The 5,5% of	
Children < 5 years with watery diarrhoea		59.5		
Children < 5 years with bloody diarrhoea		10.8		
Children < 5 with ARI		32.4		
Children between 6 and 59 months with measles vaccination		67.6		
Child Anthropometric Status (WFH % of median and				
Children with global acute malnutrition		0		
Children between 6 months and 59 months with Oedema		0		
Children between 6 and 59 months with severe acute		0		
Children between 6 and 59 months with moderate acute		0		
Children between 1 year and 59 months with a MUAC under		0		
Children between 1 year and 59 months with a MUAC under		0		
Adult Women Anthropometric Status				
Reproductive age women (15-49 years) with a MUAC < 23.0		23.6		
Reproductive age women (15-49 years) with a MUAC < 21.0		5.5		
Micronutrient Deficiencies				
Households with iodised salt		10		

¹ Anthropometric Weight for Height percent of median prevalence are representative of the Khalo Zai village population only.

women with a MUAC below 21 cm clearly indicates that they have a low weight for height, which in turn induces higher risks for their children. It might be possible that concerned children under 6 months may be affected by the nutritional status of their mothers, even though we have no elements to confirm it.

MICRONUTRIENT DEFICIENCIES:

The presence of iodized salt in the house is a proxy for the use of it and also therefore of iodine deficiency. 10% of the households had iodized salt.

HEALTH FACILITIES:

The table below lists the health services or facilities that are available to the people in Khalo Zai. A Hospital is available in Charikar. It takes about 2 hours by foot or animals to reach the hospital and one hour by car. It does cost 40 afghanis. Respondents reported that use of all health facilities decreased in the four months prior to the survey.

Health Facilities	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts	None				
Basic Health Centre	None				
Comprehensive Health Centre	None				
Hospital	Available In Charikar	1 to 2 hours	40 afghanis	Everybody	Yes
Traditional healers/Birth Attendants	None				
Skilled birth attendant	None				
Private doctor	None				

WATER SOURCES:

The issue of water is highly problematic. The main source of water comes from Sanjid river, which flows from the mountains located on the Eastern side of Khalo Zail. This river first pass through another village before arriving through a channel in Khalo Zai. The amount of water available in this channel is hardly sufficient to cover the drinking needs of the population. Before, tensions due to ethnic differences contributed to water unaccess, but the situation is now believed to be stable. However, given the amount of water brought by the river, the inhabitants of the first village uses the almost entire amount of water available for their own agricultural needs.

The other potential source of water is constituted by Panjsheer and Ghorband rivers which irrigate the Shamali plain. Due to its location in the upper side of the Shamali plain, Khalo Zai do not have an access to the water brought by Panjsheer and Ghorband rivers.

As for drinking purposes, the village does stock in a pool the small amount of water coming from the channel.

Drinking Water Source (in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
Dand	<1 hour	Worse	Worse

SANITATION FACILITIES

In Khalo Zai, there are private vault latrines in almost every house. Sanitation was not a concern at all neither for the population nor for the surveyors.

CONCLUSION: RISKS TO LIVES

Given the food security indicators and especially the very low dietary diversity score mentionned above, it is surprising that children do not face any malnutrition status. Moreover and by contrast, the other villages visited have shown alarming level of malnutrition, especially in Balto Khail, the village nearby Khalo Zai, where 5,4% of children between 6 and 59 months suffer from severe acute malnutrition and 8,1% of them suffer from moderate malnutrition

No clear explanation about these data could have been found but a few hypothesis can be put forward:

- a cultural factor such as child care practices within the Pashto population could constitute a explanatory factor. This hypothesis is linked to the fact that a nearby village such as Balto Khail, populated by Tadjiks, has a very high level of malnutrition even though it doesn't have significantly worse vulnerability indicators.

- another hypothesis would rely on food habits or feeding patterns used by these Pashtou families. It has been said by the surveyors that the mothers feed their children before themselves. Since most of the children do not use anymore breastfeeding, and since the availability of food is reduced, the mothers could be the last category of persons to have access to food, and given the reduced access to it, the category mostly affected by the food shortage. This would mean in turn that the children would be the next category of people affected by shortage of food.

- another possible explanation that has been mentioned concerned the fact that the population has been able to cover their food needs by using the cash and selling the assets they could bring with them when coming back to the village. It seems clear enough, when looking at the basic structure of the village, that this population was quite rich once upon a time. However, since they came back, they had to invest in rebuilding their houses and in buying food items because they couldn't rely anymore on agricultural production. There was a great concern amongst the population for the near future because it was said that this amount of cash has been almost entirely used. If this is indeed the case, we could consider the current nutritional situation as situated on a breaking point.

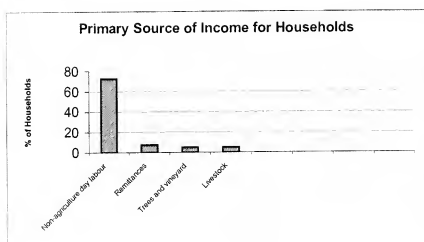
- a final hypothesis is linked with the interviews' period that took place right after Ramadan period. Since this time of year is characterised by a better access to protein rich food such as meat and since children under 14 years old do not have to follow the rules of Ramadan, it could well be the case that the nutritional situation of the children have improved during this specific period. In this case, the malnutrition rate mentioned above should be considered as being biased. By comparison, Balto Khail, the village located nearby Khalo Zai, has been surveyed at the very beginning of Ramadan period, and this could be a factor explaining the huge malnutrition gap between the two villages.

This last hypothesis is somehow confirmed by the data collected on admissions in the SFC and TFC in Parwan and Kapisa provinces from November 2003 to February 2004. These data show that there has been an increase in admission of 56% in SFC and 61,5% in admissions in TFC between November and December. This would mean that the malnutrition rate data we collected may not reflect the nutritional status of the population during a normal period. However, there is a need to say that this gap in admissions between November and December may not only be explained by the special food intake during Ramadan period but also by the fact that people do use less transportation during this period.

	November 2003	December 2003	January 2004	February 2004
Global admission SFC	672	1051	891	716
Global admission TFC	13	21	20	19

In order to shed some light on this situation, there is a clear need on one side to follow up the nutritional situation of this population and on the other side to investigate further the above-mentioned hypothesis.

LIVELIHOOD SECURITY – KHALO ZAI



INCOME SOURCES:

The primary source of income for the vast majority of households in Khalo Zai during the period of June to September 2003 was non- agriculture daily labour. 72,5% of the households were relying on this income source, while 7,5% of the households were relying on remittances. 5% of the population was relying on fruits' trees and 5% on livestock as their primary income sources. The main jobs opportunities were sellers in Kabul market or construction's work mainly in Kabul. Due to cash constraints, only a very few of them emigrated to Pakistan. No household at all mentioned crop production as being their primary income sources.

It has been reported that the salaries were increasing, but at the same time were not enough to cover the food needs. Since the cash and assets capital they brought with them when they came back has been used for their survival and has therefore strongly decreased, there was a great concern about the near future.

	Percent of households with Income Source	Percent of Households with Income Source earned by women
Trees and Vineyards	97.5	0
Non-agriculture day labour	72.5	0
Livestock	47.5	2.5
Take out loan	35	0
Informal wage labour	10	0
Remittances	7.5	0

Fruit production was a very widespread income source for Janaka Khail households, but still not an important one since no household mentioned it as being a primary source of income.

47,5% of the interviewed households could benefit from livestock products income sources but only 5% of them had such incomes as their primary income source.

CROP PRODUCTION

There are many factors that can explain the lack of agricultural production. The first and the most obvious one is directly linked to the irrigations problems. Since water has not been available for the lands during last year, almost no land could be harvested.

Even if water access would be improved in the very near future, some other factors may hinder the opportunities to cultivate lands:

- people do have to purchase the seeds and cannot rely on previous harvests. It means that cash has to be used, reducing even more the access to food bought in the markets.
- as a copying strategy, many young men do leave the village in order to earn money. Even though land could be cultivated, there would be less man power available.
- As shown below, livestock used for cultivating land are almost non-existent in Khalo Zai village.

Crop Production Livelihood Assets: Land Ownership and Draft Oxen

90% of the households do own irrigated land with an average amount of 5,1 jerib per household but none of these households do have oxens. 10% of the households owning land could rent a tractor in order to plough their land. This in turn increased their indebtedness and it was reported that these households were worried about the possibilities to give back the loans they took out.

	All Households	Rich	Medium	Poor
Households owning land (%)	90			
Average amount of land owned (jeribs)	5.1			
Households owning irrigated land (%)	90			
Average amount of irrigated land owned (jeribs)	5.1			
Households owning rainfed land (%)	0			
Average amount of Rainfed land owned (jeribs)	0			
Households with land access reduced to mortgage or	2.5			
Households owning one or more draft oxen (%)	0			
Draft Oxen Killed or sold in Last 4 months (number)	0			

LIVESTOCK

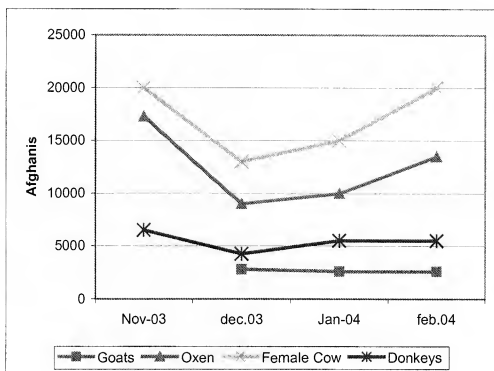
47,5% of the interviewed households could benefit from livestock products income sources but only 5% of them had such incomes as their primary income source. These households mainly sold products from their sheep and goats.

	Goats	Sheep	Draft Oxen	Bulls	Cows	Donkeys
Households with Asset (%)	32.5%	20%	0	5.0%	12,5%	20%
Average number Owned	40.7	28.5	0	1.0	7.0	5.4

No household at all had any oxen while only two households had each one bull. Since oxens are usually used to plough the land, it confirms the huge gap to be filled in order to be able to cultivate again the land.

Livestock disease

When asked about the current disease status of their livestock, the male village leaders noted that many of their sheep and goats had been affected by foot and mouth disease. However, no evidence could have been found to corroborate these statements.



Livestock Prices

Since these data have not been collected prior to the interview period, these have more an indicative purpose than an explanatory capability.

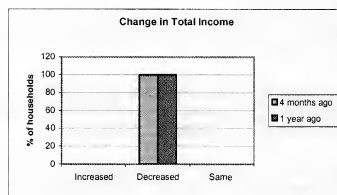
Livestock prices through the latter part of 2003 and at the very beginning of 2004 showed a systematic trend. The price of cows, oxen and donkeys decreased from November to December and increased from December to February. It is likely that this was due to seasonal demand more than anything else. Oxens have been used for ploughing purposes until November and therefore the demand obviously decreased in December.

Labour Income

The labour incomes are by far the main source of incomes for the households living in Khalo Zai. People do mainly work in bazaar or in construction either in Kabul or in Charikar. In November, the average salary for unskilled persons was 100 to 150 afghanis per day while the skilled persons could earn 250 Afghanis a day. It has been reported that the average salary of these people has increased in the past four months but o data could confirm this.

CAPACITY TO COPE: COPING STRATEGIES

The graph on the right shows that 100% of households thought that their total income had decreased both in the four months prior to the survey or relative to the previous year. This total income do not actually refer to the incomes people get from their daily labour but has been understood as being the total capital available at the time of the survey compared to the total capital available 4 months ago and one year ago. The general decrease in the capital availability can be explained by the fact that the households had to use their cash and sell their assets in order to meet their basic needs.



Coping strategies - non-erosive and erosive

The list of coping strategies is by no means inclusive of all the strategies households invoke in order to weather tough times, instead it focuses on the behaviors found to be predictive of declining livelihood and food security in Afghanistan that can easily be measured. The list has been divided into erosive and non-erosive coping strategies in order to understand the impact on a household's future livelihood security. The division is not mutually exclusive as the loss of a bicycle, motorcycle or car may impact future livelihood opportunities. Additionally, the order of the list does not reflect a continuum of behavior representing a worsening situation. Finally, the coping strategies listed below are meant to be general indicators of a worsening situation, although admittedly they will also be capturing the chronically and transitory poor households who engage in these activities on a normal basis.

Non-erosive coping strategies

In order to cope with their declining livelihood, 50% of the households were concerned by the migration of one of their members in order to find job opportunities. 32,5% of them did send their sons to work as indentured labour. 97,5 % of the households did borrow food from their relatives in order to make a meal, while 15% of them have engaged in the selling of non-productive assets such as carpets and house parts (windows, doors, etc...) in order to cover their expenses.

Erosive and distress coping strategies

Besides the usual coping mechanisms put into place to face daily expenses, a large number of households have engaged in behaviours that are likely to be erosive to future livelihood possibilities. In order to meet their daily needs of food, 67,5% took food on credit from local shop. 37% of the population took out a loan. Even though taking out a loan may not be a very significant indicator, since this loan could be used for longer term perspectives, the fact that 67,5% of the population took food on credit from local shop indicates a strong need.

	% (Number / Total Number)
Non-Erosive Coping Strategies (last four months)	
Household member migrated for labour	50
Begging	0
Sons sent to work as indentured labour	32.5
Household members worked more hours to make daily expenses	47.5
Households who borrowed food from relatives in order to make a meal	97.5
Sold Carpet / Gillims from the house	10
Sold house furniture	0
Sold house part (windows, doors, roofbeams)	5
Sold bicycle	0
Sold jewelry	0
Sold motorcycle / car	0
Consumption of dried bread	2.5
Erosive Coping Strategies	
Household took out loan	35
Household sold or mortgaged land, house or shop	0
Households who took food on credit from local shop	67.5
Sold sewing machine	2.5
Sold loom	0
Sold handcart	0
Sold grinder	0
Sold tractors / combine / agricultural machinery	0
Marry daughter early	0
Send son to military	0

Migrational Patterns

Migration is a key coping strategy for these households as 50% of the households were concerned by the migration of at least one of its members in order to find job opportunities to cope with the lack of income sources. When possible, the young men of the households were chosen to leave the village. If not possible, the head of family had to leave himself. These people left the community mainly to go to Kabul and some went off to Pakistan.

CAPACITY TO COPE: RISK AND VULNERABILITY

Households with diverse income sources are better able to cope with covariate and idiosyncratic shocks than those who rely on only one or two income sources. Said

differently, the more varied the sources of income, the easier households can deal with and recover from unexpected shocks.

Households in Khalo Zai have very few sources of income as most households rely on non agricultural daily labour. On average, they have an income diversity score of 3.2.

Average Income Diversity Score	
Better Off	3
Medium	3.33
Poor	3.19
All households	3.2

Additionally, because the migrational pattern of people having left the community is strong, the number of able-bodied working members is limited, causing further constraints to alternative livelihood options and high risk of livelihood insecurity if something happens to the working member of the household. Regarding the migrational patterns of people having returned to the community, it might play a strong role in terms of pressure on the housing and the food availability.

Alternative sources of food and feeding pattern

In addition to changes in food consumption, some families had to resort to external support to cover their food needs. 97,5 % families had to borrow food from their relatives in order to make a meal in the last four months. Along the same lines, up to 67,5% took food on credit from the local shop or bakery.

CONCLUSION

The coping strategies put in place by Khalo Zai population in order to deal with their lack of agricultural production are various. Migration is an important pattern for this Pashto population as are credits and loans. Most of all, the population can benefit from the vicinity of Charikar and Kabul in order to get income sources from daily labour.

The main things revealed by the November 2003 data collection are the following ones:

- Agricultural production is severely hindered by different factors
- Access to irrigation water is a highly problematic issue
- Drinking water quality is a concern amongst the population
- Dietary diversity is quite poor
- Emigration is a strong pattern amongst this population
- Immigration is quite common and could constitute a pressure on the already settled population

amounts to 39,6 seers. Amongst these landowners, 87,5% were able to plant irrigated wheat after the harvest on an average of 2,7 Jeribs of land while the average amount of barley planted was 0,74 Jerib. These datas indicate that some households are sharecroppers on rich landowners properties. In Ghulback, 100% of the households do own an average of 1,8 J of land. An average of 55,14 seers of wheat has been harvested per household and 1,53 J of land has been sown after the harvest period.

In Balto Khail, the average wheat harvest would correspond to the basic food consumption standards set by WFP(100 kg of wheat/person/year). However, when taking into consideration the land distribution inequality, one must say that only medium and rich landowners (35% of the total population) were able to cover their needs and to sell agricultural products in the market. In Ghulback, the harvest should cover 81% of the basic food needs of the medium population, while it is expected to cover only 46,6% of the basic food needs of the poor population which amounts to 60% of the total population. Given the small amount of harvest that this category of people could collect, they were not able to sell agricultural products in the local market. This a strong hindering factor that may jeopardize their capability to purchase other food items in order to fulfill their nutritional needs.

		Irrigated wheat	Rainfed wheat	Barley	Rice	Potatoes	Pulses
Balto Khail 100% households do own average of 2.7 Jeribs of land	Average amount of land sown (jeribs)	2.7	0	0.74	0.25	0.03	0.14
	Average harvest (seers)	83.47	0	39.6	25	5.8	4.9
Gholback 100% households do own average of 1.8 Jeribs of land	Average amount of land sown (jeribs)	1.3	0	0.5	0	0	0
	Average harvest (seers)	50.14	0	27.7	0	0	0
Khalo Zai 90% households do own average of 5.1 Jeribs of land	Average amount of land sown (jeribs)	0	0	0	0	0	0
	Average harvest (seers)	0	0	0	0	0	0

Moreover, given the fact that 62,5% of Gholback population and 65% of Balto Khail population had agricultural products as their primary income source, it is presumable that some of the wheat has been sold in the markets for exchange or for cash purposes. If this is the case, the amount of wheat owned for their own consumption did furthermore decrease. This hypothesis might be confirmed by the datas collected in Balto Khail during the November 2003 interviews, ie 2 months after the end of the harvest: at that time of the year, medium households did keep an average of 19,1 seers of wheat while poor households kept an average of 26 seers of wheat. This difference could be explained by the fact that medium households have a better income diversity and therefore were confident enough to sell more agricultural products in the local market in order to earn some cash.

It is therefore presumable that these amounts of harvest will not be enough to cover the food needs of the families until next harvest. Indeed, since the interview period took place two months after the harvest, the small amount of wheat and barley that the population had still kept at that time of the year is probably not sufficient for living during the whole winter. Amongst other tings, the next data collection round will therefore be used to confirm these suppositions and to focus on the coping strategies that Balto Khail and Ghulback population used in order to cover their food needs during this period.

As regard Khalo Zai, even though 90% of the population owns an average of 5,1 Jerib of irrigated land, only 10% of the population were actually able to plant seeds during the winter planting period. Beside the water availability problem which is developped below, this is mainly due to the lack of livestock to plough the land and to the lack of seeds. Some families were able to rent tractors in order to plough their land. Amongst the households that were able to plant seeds, 75% of them had to purchase seeds while 25% get seeds from previous harvest. The economical constraints of the people and the perspective of not having enough water anyway could explain the small proportion of people who decided to purchase seeds.

SHOCKS TO AGRICULTURAL YIELD
A disease affecting the wheat is a worrying concern in both villages. The plant causing this disease is locally called "chalchala" and in other parts of the country "whalack". 50% of Gholback's and 43% of Balto Khail cultivators have been affected by this disease which dries the wheat to an extent which ranges from 20% to 50% of the cultivated land. It is characterised by an impressive similarity with the wheat which makes its recognition almost impossible.



Parwan
Surveillance
Unit

National Surveillance System (NSS)

Transitional Islamic State of Afghanistan

Ministry of Rural Rehabilitation & Development, Ministry of Agriculture & Animal Husbandry & Ministry of Health

Parwan
Province

GHOBACK

Fall 2003

What is the NSS?

The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs. The NSS aims to cover all 32 provinces, but currently during its pilot phase is active in seven provinces.

Methodology

The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the villages (rural areas) or other blocks / communities neighborhoods (urban and semi-urban areas) with respect to agro-ecological features, economic activities, available services, infrastructures and people in a given area.

Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel sites should be interpreted as only to represent each particular sentinel site. However, it is likely, that the data from one sentinel site can signal concern for other villages in the same agro-ecological zone or similar blocks in an urban setting.

Analytical Framework

The data is organized into three categories for analysis and discussion, in order to use the information to inform policies and programs.

- Livelihood Security
- Food Security
- Risk to Lives

A description of each category is listed on the last page of the bulletin.

PARWAN PROVINCE

Parwan Province is a rural province mainly located in the Shamali Plain, North of Kabul. This plain which is a little undulating lies at around 2000 meters high and is surrounded by mountains. There are two main rivers irrigating the Province, Panjshेर river and Ghorban river. A complex irrigation system has been built that should allow the whole Province to cultivate mainly irrigated wheat. Charikar is the official Province center. This region has been heavily affected by the war between the Talebans and the Tadjiks, being at the frontline of the various battles.

AGRO-ECOLOGICAL ZONES

It has been decided to divide Parwan Province in three different agro-ecological zones

Zone 1: Irrigated Land with heavy water access - location in plain: Balto Khail

Zone one encompasses villages which are located East of Charikar. These villages have enormous amount of water due to the fact that they are situated on the lower side of Shamali plain and are irrigated by both the Panjshेर river and the Ghorband river. Their main income sources are constituted by agricultural production. Balto Khail, the sentinel site that has been chosen, is located 12km away from Charikar, on its Eastern side. The village is found in the vicinity of Panjshेर and Ghorband rivers junction. Due to its location on a hillside, the lower part of the village is characterised by intensively irrigated lands while the upper part has to face problems regarding access to water. There are 220 households living in the village which are Tadjiks and speak Dari. The average number of persons living in each household is 6,4.

Zone 2: Irrigated Land with poor access to water - location in plain: Khalo Zai

Zone two covers the Western part of the Shamali plain (West from Charikar). This zone faces problems of water access which are caused by their location in the upper side of the plain. Non agricultural daily labour in the nearby cities is the main source of income for these populations. Khalo Zai is located 13 km on the South-Western side of Charikar, 3 km away from the main road Kabul-Mazar-e-Sharif. The people from Khalo Zai are in their vast majority Pashto and speak Pashto. During the Talebans period, this village was located south of the former frontline, on Talibans side, whereas the neighbouring villages were located on the other side of the frontline, on Tadjik side. The village has been almost completely destroyed during the fighting period and the local population had to leave their village. Moreover, the region suffered from drought until last year. During 2002, the population came back in the village and since then, returnees are regularly coming back in their native village. It is a big village that can be separated in three different mantaqs. Khalo Zai is the most populated village chosen in Parwan province with 850 households. The average number of persons living in each household is 7.

Zone 3: Irrigated Land - location in valleys: Gholback

Zone three covers the northern section of Parwan Province, a zone that lies in the Panjshेर's valleys. These villages are situated in sharp valleys and are irrigated by a river passing in the bottom of the valley. Their main income sources are constituted by agricultural production. Gholback is located in one of Panjshेर valleys, approximately 65 km North of Charikar and 25 km from Gulbahar. It is a village which lies on the two sides of a sharp valley with a river passing at the bottom of this valley. The upper side of the village is covered by houses while the lower side, near the river, is dedicated to agricultural lands. Due to their situation in stairs, the surface of each cultivated parcel is rather small, amounting on average to 1,8 Jerib. Many villages in the Panjshेर valleys do share the same basic characteristics as Gholback. They are 200 households living in Gholback which speak mainly dari and are of Tadjik origins. The average number of persons living in each household is 7,1.

Information for this report was collected in one survey that took place in november 2003. This survey is based on the standardized national food security and nutrition surveillance questionnaires. These questionnaires were targeted at

both male and female focus groups as well at males and females households.

GENERAL GHOLBACK INFORMATION

Gholback is located in one of Panjsheer valleys, approximately 65 km North of Charikar and 25 km from Gulbahar. It is a village which lies on the two sides of a sharp valley with a river passing at the bottom of this valley. The upper side of the village is covered by houses while the lower side, near the river, is dedicated to agricultural lands. Due to their situation in stairs, the surface of each cultivated parcel is rather small. The average surface of land cultivated per household is 1,8 Jerib. Many villages in the Panjsheer valleys do share the same basic characteristics as Gholback.

They are 200 households living in Gholback with an household average size of 7 which is quite similar as the other villages assessed in the region. The population living in the village speak mainly dari and are of Tadjik origins. The *kariador*, village leader, and the *shura* group of decision-making elders, handle village level decisions.

Average Household Size	
Rich	
Medium	5.8
Poor	7.3
All Households	7.1

Transportation and access

Gholback is located 20 km far away from the valley entering point. It takes about one and a half hour by foot to reach the main market accessible for the local population, Anobah market.

There is one primary school and one high school which are both accessible for boys and girls in Gholback village itself.

As regard the health facilities, there is an ACF's Supplementary Feeding Centre 15 minutes away from the village. In Anawa, one hospital owned by Emergency NGO is available with all the facilities and is free of cost.

The community categorized households into two different wealth groups, or socio-economic categories. 60% of the population living in the village has been categorized as being poor while 40% as being in a medium situation. None of the households have been considered as being rich.

Medium Households (40%)

An average medium household has 4 to 5 Jeribs of land and owns 10 to 20 livestock, mainly goats and sheep. Some of these households do have official jobs as working in the governmental army or being drivers for governmental institutions.

Poor Households (60%):

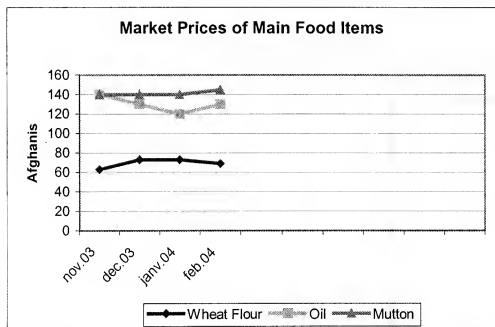
An average poor person has 0,5 to 1 Jerib of land and very few livestock. They do cultivate their own parcels of land or have agricultural daily work on the lands of their neighbours in exchange of harvests parts. Otherwise, they are used to have informal wage labours, mainly in the construction field, be it in Parwan and Kapisa province or in Kabul.

FOOD SECURITY – GHOLBACK

Markets and Market Price Indicators:

Location of Market	Time taken to reach market		Cost of getting to market (Afs)	Market Accessible in winter and Spring
	Vehicle	Foot/animals		
Anobah	30 minutes	1,5 hour	--	Market accessible in winter

The main market accessible for Gholback population is located in Anobah. It takes about 1,5 hour by foot and 30 minutes by vehicle to reach this market which is accessible also in winter.



increasing a bit during the next month.

DIETARY DIVERSITY

Dietary diversity is a primary component of food security. Previous studies have shown that dietary habits in Afghanistan are not very diverse and consequently people are at risk of micronutrient deficiency disorders and related diseases. In order to better understand the quality of diets in the last four months, surveyors asked about the frequency of eating foods from different food groups. The table below reflects the average consumption of each of the following food item (excluding Ramadan and festivals times). Compared to Khalo Zai, Balto Khail has a better dietary diversity.

The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households combined. The data shows that on average poor households are only eating protein rich foods, such as meat and eggs once a month or less. They are however getting protein from dairy products, pulses and green leafy vegetables which they eat on a more frequent basis though probably not frequent enough (2 to 3 times a month). Because this data does not reveal information on sufficiency of protein intake, it is hard to assess whether there is inadequate protein intake. It is however highly unlikely, based on the frequency of consumption of complementary sources (pulses or barley) or sources which are complete proteins (meat and milk-related products) that households are eating enough to be meeting adequate protein requirements.

Wealth Group	Milk, Yoghurt Krut, etc		Green Leafy Vegetables		Other vegetables		Fruits	
	Meat	Eggs	Pulses					
Better Off								1 = Never Eat
Medium	4	3.6	3.6	4.8	4.8	4.2		2 = Once a month or less
Poor	2.1	1.7	2.8	3.0	2.1	1.9		3 = 2 to 3 times a month
All	2.4	1.9	2.9	3.3	2.5	2.2		4 = Once weekly
Households								5 = Twice weekly
								6 = 3 to 5 times weekly
								7 = Always

CROP PRODUCTION

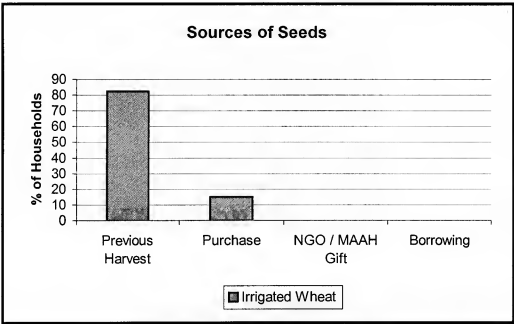
Rural and semi-rural areas in Afghanistan are still highly dependent on subsistence agriculture for their own consumption, thus monitoring annual crop yields and amount planted can help predict the food security situation of households. The main food staple grown in Gholback is irrigated wheat. Beside that, barley has been planted and harvested. In Ghulback, 100% of the interviewed households do own an average of 1,8 Jeribs of land. Amongst these households, an average of 1,3 Jerib has been devoted to irrigated wheat while 0,5 Jerib was used to cultivate barley.

	Irrigated wheat	Rainfed wheat	Barley
Average amount of land sown (jeribs)	1.3	0	0.5
Average harvest (seers)	50.14		27.7

The average amount of irrigated wheat harvested per household for the 2003 harvest season was 50 seers (1 seer = 7 kg), while the average amount of barley harvested during the same period amounts to 27,7 seers. However, even though it has been reported that the 2003 harvest was better in quantity compared to previous

years, it is highly presumable that this amount of harvest will not be sufficient to cover the food needs of this population until next harvest.

Amongst the households that were involved in crop production, 82,5% got seeds from their previous harvest, while 17,5% had to purchase them. This indicates a good capacity in terms of self-sufficiency.



People from Gholback are used to cultivate fruit trees, mainly mulberry, almonds, apricots, pomegranate, walnut and apple trees. The whole production of these fruit trees is dedicated to their own consumption and is therefore not sold in the markets.

The informations collected reveal that the average number of irrigated wheat seers that have been kept at the time of the interview was 70 seers (490 kg) for medium households while poor households kept an average of 40 seers (280 kg). Given the average amount of 120 kg of wheat/person/year needed to insure basic food needs, one can say that medium households will be able to rely 8 months on their own production while poor households will only be able to rely 4 months on their amount of harvest.

FOOD SECURITY PERCEPTION

Household perception of food security is an important indicator of current food security status. In Gholback, 50% of the population considered the food situation to be worse than 4 months ago while 40% expected the food situation to be worse in the four coming months. This proportion is confirmed by the households enumerators who thought that 50% of the population did not have enough food for the next 4 months.

PERCEPTION OF FOOD SECURITY INDICATORS	Percentage out of 40 households
Consider food situation to be worse in comparison to 4 months ago	50%
Consider food situation to be worse than one year ago	52.5%
Considered food situation to not be sufficient at time of survey	-
Worried where their food was coming at the time of survey	30%
Expect the food situation to be worse in the next 4 months	40%
Enumerators thought households did not have enough food for the next 4 months	50%

CONCLUSION: CURRENT FOOD SECURITY STATUS

It is most probable that the amounts of harvest collected by the poor category of people will not be enough to cover the food needs of most of their families until next harvest, and thus such households will have to put in place coping strategies to fill the hunger gap. However, when compared to the two other villages assessed in the province, one must say that the food situation in Ghulback is much more secure. This is mainly due to a good water availability and irrigation system.

Dietary diversity remains a concern especially for medium and poor wealth groups. The magnitude of the impact of having a low quality diet on disease and mortality and therefore economic productivity is still not entirely clear, but needs to be further explored. Education on dietary diversity, particularly with a focus on how to ensure access to all essential nutrients using local foods could help improve the quality of people's diets.

RISKS TO LIVES - GHOLBACK

MORTALITY INDICATORS:

The crude mortality rate (CMR) of 1.14 is above the emergency threshold rate of 1.0 deaths/ 10,000 people / day. The under-5 mortality rate of 2.97 is as well above the emergency threshold rate of 2.0 deaths/ 10,000 people / day.

MORBIDITY INDICATORS:

The morbidity indicators included in the surveillance system are associated with a risk of mortality and are the primary causes of death for children under five in Afghanistan. The incidence of watery diarrhoea among children under 5 in Gholback was high, with 60.6% of them having been concerned during the two weeks prior to the survey. The presence of 15.2% of children under five having bloody diarrhoea is of great concern as well.

The percent of children under five suffering from Acute Respiratory Infections in Gholback is 33.3%.

RISKS TO LIVES INDICATORS	%
Mortality Indicators	
Crude mortality in last 4 months (Deaths / 10 000 / day)	1.14
Under 5 mortality in last 4 months (Deaths / 10 000 / day)	2.97
Births in last 4 months attended by a Skilled Birth Attendant	0
Morbidity Indicators	
Children < 5 years with watery diarrhoea	60.6
Children < 5 years with bloody diarrhoea	15.2
Children < 5 with ARI	33.3
Children between 6 and 59 months with measles vaccination	78.8
Child Anthropometric Status (WFH % of median and MUAC)	
Children with global acute malnutrition (Oedema/Severe/Moderate)	6.1
Children between 6 months and 59 months with Oedema	0
Children between 6 and 59 months with severe acute malnutrition	0
Children between 6 and 59 months with moderate acute malnutrition	6.1
Children between 1 year and 59 months with a MUAC under 13.5 cm	0
Children between 1 year and 59 months with a MUAC under 12 cm	0
Adult Women Anthropometric Status	
Reproductive age women (15-49 years) with a MUAC < 23.0 cm	12
Reproductive age women (15-49 years) with a MUAC < 21.0 cm	2
Micronutrient Deficiencies	
Households with iodised salt (only includes households with salt)	10

CHILDREN NUTRITIONAL STATUS¹:

A screening of the selected households, based on weight for height measurement percentage of the median and MUAC, did detect the following level of malnutrition amongst the children between 6 and 59 months: 6.1% of children between 6 and 59 months were suffering from global acute malnutrition but none of them were affected by severe acute malnutrition.

As shown in the table below, the records from the Supplementary Feeding Centres that ACF hold in Gholback area and in Anobah indicate that November have seen the lowest number of admissions in both SFCs and

a strong increase of admissions in December.

The low number of admissions in November and the increase in SFC's admissions in December might be explained by the specific period of Ramadan which took place in November. Since this time of year is characterised by a better access to protein rich food such as meat and since children under 14 years old do not have to follow the rules of Ramadan, it could well be the case that the nutritional situation of the children have improved during this specific period. However, this gap in admissions between November and December may not only be explained by the special food intake during Ramadan period but also by the fact that people do use less transportation during this period.

Since the screening of the households' children took place during the very period of Ramadan, it can be supposed that the global acute malnutrition rate mentioned above might have increased during the following months.

	Oct. 2003	Nov. 2004	Dec. 2004	Jan. 2004	Feb. 2004
Admissions in Gholback's SFC	23	14	52	26	17
Admissions in Anobah's SFC	69	40	80	68	44

¹ The percentages mentioned below were used for convenience only and do not have a statistical significance. Samples are indeed too small to draw immediate conclusions on prevalence. These figures only show trends setting for longer term understanding of the health and nutrition situation in this area.

ADULT WOMEN NUTRITIONAL STATUS:

Low MUACs in reproductive-age women has been associated with high child and maternal mortality making it an important indicator for increased risks to adult women mortality. In Gholback, 12% of women have a MUAC below 23 cm, which indicates that these women may be at-risk of malnutrition. 2% of the women surveyed have been recorded with a MUAC under 21cm.

MICRONUTRIENT DEFICIENCIES - IODINE:

The presence of iodized salt in the house is a proxy for the use of it and also therefore of iodine deficiency.

No households had iodized salt at all. This is particularly worrying, given that iodine deficiency in women of childbearing age is of grave concern due to the effects on the developing foetus. Children of iodine-deficient mothers may be born with varying degrees of cretinism and development problems, both physical and mental. A nutritional survey done by ACF in March-April 2003 in Parwan and Kapisa provinces found alarming rates of goitres among the population. 64.7% of mothers were found to have a visible goitre, resulting from iodine deficiency, while 78.2% of the families had one or more visible goitre case in the family.

Health Facilities Table

The table below lists the health services or facilities that are available to the people in Gholback. An ACF Supplementary Feeding Centre which is open one day per week is available in a nearby village which can be reached in 15 minutes by walk. There is a hospital owned by the NGO Emergency in Anobah, one hour far away from Gholback by foot, where health services are free of charge.

	Location of facility	Time taken to reach facility	Cost of getting to the facility (Afs)	Access to facility	Facility Accessible in winter and Spring
Health posts					
Basic Health Centre	Nearby village	15 minutes	No cost involved	Everybody	Yes
Comprehensive Health Centre	None				
Hospital	Anobah	1,5 hour		Everybody	Yes
Traditional healers/Birth Attendants	None				
Skilled birth attendant	None				
Private doctor	None				

WATER SOURCES:

The main water source comes from a branch of the Panjsheer river that flows through the valley. People do drink safe water coming from springs.

SANITATION FACILITIES:

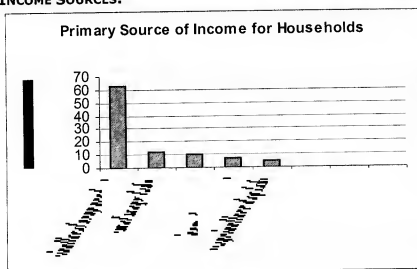
It has been reported that everybody has a private vault latrine in his house.

Drinking Water Source Table

(Source listed in order of use)	Time taken for water collection	Quality change since last year	Quantity change since last year
Spring	Less than 1 hour	Same	Increased

LIVELIHOOD SECURITY - GHOLBACK

INCOME SOURCES:



The primary source of income for the vast majority of households in Gholback during the period of June to September 2003 was agricultural crop production. 62,5% of the households were relying on this income source as their primary income source. 12,5% of the households were relying on formal wage labour, working for the governmental army or as drivers for governmental institutions. 10% are involved in trade.

	Percent of households with Income Source	Percent of Households with Income Source earned by women
Agricultural Production	97.5	0
Trees and Vineyards	57.5	0
Livestock	57.5	2.5
Take out a loan	27.5	0
Formal wage labour	25	0
Remittances	0	2.5

As shown by the graph on the left, the most widespread income source in Pufdom was agricultural production. 97.5% of the interviewed households mentioned it as an income source. This demonstrates the good agricultural potential of this area as well as the good distribution system in terms of access to these incomes. Beside crop production, 57.5% had fruit trees as a source of income while the same proportion had income from livestock products. 27.5% of the interviewed households took out a loan while 25% of them could earn money from informal wage labour.

The table below shows the crop calendar for irrigated wheat in Balto Khail.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Irrigated Wheat													Spring Planting Winter Planting Harvesting

Crop Production Livelihood Assets: Land Ownership and Draft Oxen

100% of the households do own irrigated land with an average amount of 1,8 jerib per household. 53,8% of the households own one or more oxen.

	All Households
Households owning land (%)	100
Average amount of land owned (jeribs)	1.8
Households owning irrigated land (%)	100
Average amount of irrigated land owned (jeribs)	1.8
Households owning rainfed land (%)	0
Average amount of Rainfed land owned (jeribs)	0
Households with land access reduced to mortgage or sale (%)	0
Households owning one or more draft oxen (%)	53.8
Draft Oxen Killed or sold in Last 4 months (number)	0

Shocks to Agricultural Yields

Altogether, 64,7% of the households producing wheat had between 20 to 50% of their crops destroyed. 5,9% of them had more than 50% of their crops destroyed. The main reasons behind that was a disease affecting the wheat. It was reported that the wheat became dry, yellow and this disease was propagating itself (name of the disease in dari: chachala). 6,5% of the households did loose between 20 to 50% of their barley production.

	Households with between 20 and 50% of crop destroyed (%)	Households with more than 50 % of crop destroyed (%)	Reasons behind crop destruction
Irrigated Wheat	64,7%	5,9%	Other
Barley	6,5%	-	Other

LIVESTOCK

None of the households interviewed had their primary source of income from livestock and livestock products in the four months prior to the interview. Nonetheless, 57% of the households do benefit from livestock incomes. The most widely owned animal is oxen. 52.5% of the households do own such an animal for agricultural purposes. There are however disparities between the wealth groups since 73% of the medium households do own oxens while 37% of the poors have access to this ploughing animal.

The disparities are even higher for sheeps and goats. An average of 53% of medium households do own sheeps and 33% of the same category do own goats while only 12,5% respectively 4,2% of the poor households do own these animals. By contrast, cows are rather well distributed since 53% of the medium and 38% of the poors can benefit from cows' products.

As regard the cows, the goats and the sheeps, a common pattern found in this village is for the people not owning any of these animals to take care for a certain period (1 to 3 years) of owners' animals. In exchange, they can share these animals products and receive one of them when these animals give birth.

As regard oxens, given the fact that 2 oxens should work on the land to plough it and that most of the families have only one oxen, the families do a kind of contract between them by borrowing their only oxen. The families that do not have any oxen have to pay a rental price of 200 afghanis per oxen/day.

	Goats	Sheep	Draft Oxen	Bulls	Cows	Donkeys
Households with Asset (%)	15%	30%	52.5%	2.5%	42.5%	22.5%
Average number Owned	4.7	3.4	1.1	1.0	2.0	1.0

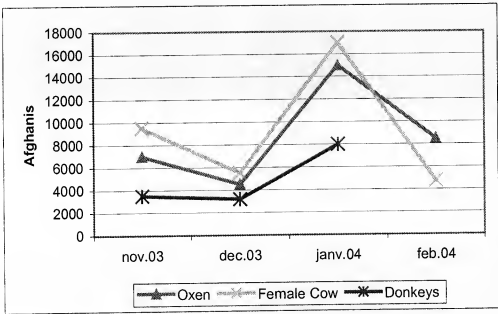
Livestock disease

When asked about the current disease status of their livestock, the male village leaders noted that 100% of their cattle and oxens, as well as their sheeps and goats, were affected by foot and mouth disease. Foot and mouth disease seems to be a major concern for the three villages assessed in the area. It is however highly unlikely that 100% of theses animals suffered from foot and mouth, but is likely that foot and mouth is a serious problem that should be further investigated.

Even though foot and mouth is rarely a deadly disease, it has a tremendous contagious power and affect the vitality of the contaminated animals. This disease has therefore not a direct impact on decapitalisation but given the impact it has on productivity, it should be considered as a strong hindering factor towards better agricultural production and self-sufficiency.

Livestock owners in Ghulback have not had their animals vaccinated and thus their livestock are at risk of suffering from disease outbreak. Veterinary services are available in Adobah but it was reported that only a few households could afford the cost of vaccination for their livestock.

	Cattle and Oxen (% affected)	Sheep and Goats (% affected)
Foot and Mouth	100%	100%



Livestock Prices

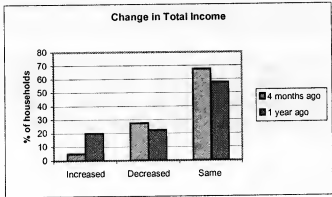
Livestock prices through the latter part of 2003 and at the very beginning of 2004 showed some clear trends. The prices of oxens, cows and donkeys did increase significantly from December to January before decreasing to the same extent in February. It is however difficult to understand such changes in prices and it is likely that this was due to seasonal demand more than anything else.

Handicrafts

No handicrafts activities as income sources have been mentioned by the interviewed households

CAPACITY TO COPE: COPING STRATEGIES

The graph on the right shows that the majority of households thought that their total income remained the same compared to the prior 4 months and the prior year. 22.5 % thought that their total income has decreased compared to one year ago while 20% of them thought it had increased. More significantly, 27.5% of the households



thought their total income has decreased in the last 4 months while only 5% thought it has increased.

Coping strategies - non-erosive and erosive

The list of coping strategies is by no means inclusive of all the strategies households invoke in order to weather tough times, instead it focuses on the behaviors found to be predictive of declining livelihood and food security in Afghanistan that can easily be measured. The list has been divided into erosive and non-erosive coping strategies in order to understand the impact on a household’s future livelihood security. The division is not mutually exclusive as the loss of a bicycle, motorcycle or car may impact future livelihood opportunities. Additionally, the order of the list does not reflect a continuum of behavior representing a worsening situation. Finally, the coping strategies listed below are meant to be general indicators of a worsening situation, although admittedly they will also be capturing the chronically and transitory poor households who engage in these activities on a normal basis.

Non-erosive coping strategies

In order to cope with their declining livelihood, 25% of the households were concerned by the migration of at least one of their members in order to find job opportunities. The most common migration destinations were Kabul, Pakistan and Iran. 17.5% of them did send their sons to work as indentured labour. 10% of them have engaged in the selling of non-productive assets such as bicycles, carpets and house parts (windows, doors, etc...) in order to cover their expenses.

90 % of the households did borrow food from their relatives in order to make a meal. This indicates a strong solidarity pattern amongst the village which is corroborated by the fact that these populations are used to practice zaqat, but in the same time it indicates regular lack of access to food.

Erosive and distress coping strategies

Besides the usual coping mechanisms put into place to face daily expenses, some households have engaged in behaviours that are likely to be erosive to future livelihood possibilities. 30% of the households took food on credit from local shop and 27,5% of the population took out a loan, increasing their indebtedness and creating therefore further constraints on their immediate future.

	% (Number / Total Number)
Non-Erosive Coping Strategies (last four months)	
Household member migrated for labour	25
Begging	0
Sons sent to work as indentured labour	17.5
Household members worked more hours to make daily expenses	12.5
Households who borrowed food from relatives in order to make a meal	90
Sold Carpet / Gilims from the house	5
Sold house furniture	0
Sold house part (windows, doors, roofbeams)	5
Sold bicycle	0
Sold jewelry	0
Sold motorcycle / car	0
Consumption of dried bread	0
Erosive Coping Strategies	
Household took out loan	27.5
Household sold or mortgaged land, house or shop	0
Households who took food on credit from local shop	30
Sold sewing machine	2.5
Sold loom	0
Sold handcart	0
Sold grinder	0
Sold tractors / combine / agricultural machinery	0
Marry daughter early	0
Send son to military	0

CAPACITY TO COPE: RISK AND VULNERABILITY

Income Diversity and Capacity to Cope – Risk to LivelihoodsHouseholds with diverse income sources are better able to cope with covariate and idiosyncratic shocks than those who rely on only one or two income sources. Said differently, the more varied the sources of income, the easier households can deal with and recover from unexpected shocks.

Households in Gholback have relatively few sources of income. Coupled with the low sources of income diversity is that fact that these households have a high dependence on agriculture related income sources and therefore are particularly vulnerable to covariate risk. Alternative livelihood options that do not have the systemic risk involved with agriculture production would reduce the risk of being impacted by subsequent years of poor climatic conditions.

Average Income Diversity Score	
Better Off	
Medium	3.6
Poor	2.9
All households	3.3

CONCLUSION

Relative to other parts of Parwan Province, Gholback and villages in the Panjsheer area are better off than villages in the other parts of the province. The population can benefit from a good water availability and accessibility and this is confirmed by a comparatively good harvest in 2003. Still, since agricultural production is by far the main income source of this site's inhabitants, it involves covariate risks surrounding climatic conditions.

The main things revealed by the November 2003 data collection are the following ones:

- Access to water, be it for irrigation or for drinking purposes, is comparatively good
- The amount of wheat harvested, even though not sufficient to cover the basic food needs of the poor category of the population, is comparatively better than other areas assessed in the province.
- Dietary diversity is quite poor
- Even though we cannot mention any decapitalisation of livestock, foot and mouth disease seems to be endemic in the area, thus hindering the agricultural production
- An agricultural disease called "chalchala" is a major concern for agricultural crop production
- Agricultural day labour is not a common income source because they are very few rich families who can afford to pay workers
- Iodine deficiency is a great concern since goiter is a widespread problem along Parwan province

FRUIT PRODUCTION

Beside that, people from the three villages are used to cultivate different types of fruit trees, as shown by the table below. Except for mulberries and grapes, the fruits production is exclusively intended for their own consumption.

	Apricot trees	Almond trees	Grape vines	Mulberry trees	Pomegranates	Poplar trees
Balto Khail	6.25	3	356	5.7	5.6	29
Khalo Zai	1	12	988	32	2	0
Ghulback	3	3.3	5.5	12.6	4.8	6

According to the datas collected on dietary diversity, it seems however that the good availability of fruits in the region hardly had any impact on their nutritional diet. On average fruit consumption was indeed very low during the four months prior to the interviews, people eating fruits on average once a month.

VEGETABLE PRODUCTION

Balto Khail is the only village that did harvest some vegetables, ie 4,9 seers of pulses. During the winter planting season, they have been able to plant 0,14 Jerib of land.

ACCESS TO WATER

The Shamali plain is irrigated by two rivers taking their origins in the Northern mountains: the Panjsheer river and the Ghorband river. Since Balto Khail is located nearby the junction of both rivers, the lower side of the village has to suffer from lands flood while the upper side cannot benefit from the huge amount of water available because no proper irrigation system does exist. For drinking water, the villagers do use the river water. In Ghulback, water is not a problem since the main water source comes from a branch of the Panjsheer river that flows through the valley.

In Khalo Zai, the issue of water is highly problematic. The main source of water comes from Sanjid river, which flows from the mountains located on the Eastern side of Khalo Zail. This river first pass through another village before arriving through a channel in Khalo Zai. The amount of water available in this channel is hardly sufficient to cover the drinking needs of the population. Before, tensions due to ethnic differences contributed to water unaccess, but the situation is now believed to be stable. However, given the amount of water brought by the river, the inhabitants of the first village uses the almost entire amount of water available for their own agricultural needs. The other potential source of water is constituted by Panjsheer and Ghorband rivers which irrigate the Shamali plain. Due to its location in the upper side of the Shamali plain, Khalo Zai do not have an access to the water brought by Panjsheer and Ghorband rivers.

As for drinking purpose, Khalo Zai does stock the water coming from the channel in a pool while Balto Khail population drinks water from the river. In Ghulback, people do drink safe water coming from the spring. In the two first villages, it was reported that some hand pumps have been installed but either they were now out of function or they were exclusively used by the riche people.

ACCESS TO SEEDS

Except for very few Khalo Zai people who did sown their land after having purchased seeds, most of the interviewed households did use seeds coming from their previous harvest. Even though this might be a factor of low seeds potential, it nonetheless indicates that people generally have sufficient coping strategies to fulfill their basic food needs without having to eat their own seeds.

LIVESTOCK

In Balto Khail, 60% of the households do own an average of 1,7 oxen for ploughing purpose while 54% of Ghulback's population do own an average of 1 oxen. In Khalo Zai, no households do own oxen at all. The lack of oxen in Khalo Zai can be considered as a supplementary hindering factor for agricultural purposes, yet it is obvious that the villagers had no reason to purchase oxen without possibilty to use them for ploughing. In Balto Khail and Ghulback, there are renting or sharing procedures that allow people to use others' oxen in order to plough their land.

42,5% of Ghulback households do own an average of 2 female cows while 30% do own an average of 3,4 sheeps. In Balto Khail, 70% of the households do own an average of 1,9 cow but very few sheeps and goats, while in Khalo Zai, 20% of the households do own an average of 28,5 sheeps and 32,5% an average of 40,7 goats.

No village at all mentionned livestock products as being a primary income source. Nonetheless, 57,5% of the population in Ghulback did consider livestock products as an income source. Only 5% of the population in Khalo

NSS METHODOLOGY OVERVIEW¹

The National Surveillance System (NSS) is based on a sentinel site system. These sentinel sites are tracked over time to monitor changes in food security, livelihoods, and nutritional status. The sampling methodology is based on a multi-stage sample selection process and incorporates both urban and rural areas in the sample. The table and narrative steps below detail the process used to determine the stratification framework and levels of the sample.

Rural strata	Urban strata	Rural Representation and Method of Division	Urban Representation and Method of Division
Provinces	Provinces	Every province is to be represented in the surveillance system. 33 provinces are divided according to Ministry of Interior definition of provincial boundaries.	
Districts	Urban Areas	Every rural district is to be represented in the surveillance system. Rural districts are divided according to Ministry of Interior definitions, except in the cases where currently recognized local administrative boundaries differ.	Urban areas are defined as having a population over 500,000, >100 shops and permanent food market. These include Kabul, Mazar-i Sharif, Kandahar, Herat, Jalalabad, Kunduz.
Livelihood Zone	Livelihood Groupings	Districts are divided into agro-ecological or livelihood zones.	Urban centers are divided into <i>nahia</i> , which is the sub-unit of an urban area used by the Central Statistic Office. <i>Nahias</i> in the urban setting are categorized into livelihood groupings.
Sentinel Site – Villages or Mosque Areas	Sentinel Site – Urban Blocks	One settlement or mosque area within a settlement is selected from each livelihood zone as the sentinel site.	A block is selected from each of the livelihood groupings. If the block is not large enough for a sufficient sample, then a neighboring block will also be included in the sample.
Wealth groups	Not applicable	In each sentinel site settlement, a wealth group breakdown is conducted in which all the households will be categorized into three wealth groups; poor, medium, and better off.	Because people do not have detailed information on households in their blocks, it is difficult to implement a wealth group breakdown.
Households	Households	Households are randomly selected proportional to actual representation in the population of households within the three wealth groups. The number of households selected and the selection process is detailed below.	Households are randomly selected from the block.
Individuals	Individuals	Individuals are selected from each household in the survey. Selection of individuals is only necessary for measuring certain indicators (i.e. anthropometric status) and will be based on the case definition of the indicator.	

The steps for defining livelihood zones and household selection for rural application of the NSS sampling methodology are explained below, and these steps can also be applied to the corresponding urban strata discussed in the table above.

Defining Livelihood Zones within a District

The first step completed in defining a livelihood zone was to find information on the following subjects in all settlements in a district, or as many as possible.

Defining Criteria:

- Agro-ecological context (topological/geological/soil description, water, land-cover/land-use)
- Economic resources and activity (sources of income and food, access to markets)
- Services (health, education, water, roads, other services)
- People (ethnicity, number of households in settlement).

Once the information was collected, the district was separated into livelihood zones based on *agro-ecological context* and *economic resources and activity* features. *Services* and *people* features were also considered but were not usually the basis for livelihood zone distinction.²

¹ Information on the methodology can be found in the NSS methodology document on <http://www.mrrd.gov.af/vau/>

² In some areas of implementation, the agro-ecological zones used by the 2002 WFP-implemented *Country-wide Food Needs Assessment* were used to define livelihood zones.

Sentinel Site Selection

Since sentinel sites are meant to be representative of their zone, the site, to the extent possible, was selected to mirror the majority of the settlements in the livelihood zone with respect to the defining criteria mentioned above. Inevitably, it is impossible to find homogeneity across all of these indicators, thus *agro-ecological context* and *economic resources and activities* were given a priority. Additional factors that were considered when choosing a sentinel site included:

- Population of sentinel site should be representative of a majority of settlements in the zone
- Distance from roads and markets relative to other villages/towns in zone
- Presence of other related surveys in order to avoid survey fatigue
- Permission by local authorities and community leaders.

Wealth Group Differentiation

As part of focus group discussions, government surveillance unit teams separately asked male and female focus group members to identify how the people in the community define wealth and then define better off, medium and poor households. Once these characteristics were agreed upon, both male and female teams used the list created in the male focus group of all households in the community to place each household into a wealth group category and then asked for the rationale behind the placement. From here male and female lists were checked to find out when the households had been assigned to a different wealth group. If households were different, male and female surveyors together had to decide on a mutually agreeable placement for the households, either by following up with focus group members or by noting that one group had a knowledge gap regarding the household under discussion.

Household Selection

For the purpose of the national surveillance system, a household is defined as a group of individuals sharing income and expenditure and that are living within the same compound. Households were randomly selected proportional to their actual representation in the population within the three wealth groups. The number of households surveyed depended on the size of the sentinel site. If the settlement had over 200 households, a mosque area or a distinct community area was selected as the sentinel site. For nomadic populations of less than 50 households, it was recommended to include all households if possible.

Total households in village	Number of households selected
< 50	All households if possible
50 – 75	20
76- 99	30
100-200	40
> 200	Choose community within village as sentinel site

Selection of Individuals

Selection of individuals within households was only necessary for measuring certain anthropometric status. In this case, all individuals in selected households meeting the case definition criteria for these indicators were included in the survey

Data Collection Instruments and Fieldwork

Data collection for the NSS was originally envisioned to occur three times a year,³ and the fall round 2003 was the first round using standardized questionnaires. The male and female sentinel site questionnaires included focus group discussions with male and female elders. The male household questionnaire was asked to the male head of household and the female household questionnaire was asked to the female head of household. Many of the questions included in the NSS standardized questionnaires referenced the period four months prior to the survey in order to gain an understanding of issues of seasonality in relation to livelihood strategies, food security and risk to lives. The market survey questionnaire collected data at the provincial capital as well as at the main permanent food market nearest to each sentinel site on a monthly basis.

Government surveillance data collection teams consisted of one NGO supervisor, two staff from MRRD (one male and one female), two staff from MAAH (one male and one female) and two other casual staff. They were all trained on the surveillance system project as well as the implementation of the questionnaires.

³ Lessons learned from the fall round suggested that collecting data three times a year was neither financially feasible nor necessary for most locations. The pilot NSS collected only a second round of data in spring 2004

Time was spent working with ministry partners and other stakeholders to define case definitions for items such as morbidity, livestock diseases and livelihood strategy categories. Please see guidance notes for the questionnaires posted on <http://www.mrrd.gov.af/vau/>. It is worth noting here that livelihood strategies were grouped according to the following categories:

Agricultural crop production	Cultivators who own the land, sharecroppers, or farmers renting land from others for cultivation.
Agricultural day labor – casual labor	Anybody participating in the daily or casual labor related to agriculture. This could include land preparation, sowing, weeding, harvesting and post-harvest processing.
Agricultural livestock	Households generating income (cash or in-kind) from their own livestock
Carpets/handicrafts	Households that weave carpets or make handicrafts and sell or exchange them
Carpets/handicrafts – wage labor	Households that weave carpets or make handicrafts on a wage labor basis.
Shops/trader – own business	Anybody who engages in significant trade, e.g. shop or livestock trader.
Small trade related business - push carts, mobile street vendors etc.	Businesses that are smaller scale than those above, such as push carts, mobile street vendors etc.
Formal wage labor (e.g. government/ health/ education/ administrative)	
Informal wage labor (e.g. shepherd, driver)	Informal wage labor indicates that a more permanent or longer term labor contracts than daily labor.
Non-agriculture day labor (artisan and manual labor)	Non-agricultural daily labor covers a range of activities not related to agriculture, but where people normally work daily or casually.
Rental income (land, house, shops, agriculture equipment, transport vehicles)	People deriving income from the rent of land, houses, shops and equipment such as combine harvesters or tractors.
Remittances	People deriving income from family members remitting money from another country.
Take out loan	Money received on credit or loan.
Repayment of loans	Money received from someone who repaid a loan.
Begging	
Gifts/tithes/gleaning/aid	This category includes gifts received from friends, family and community members. It includes <i>zakaat</i> , gleaning rights, and aid.
Mortgaging land, house, shop	
Collection and sale of natural resources	Natural resources can be bushes, trees, mushrooms, wild plants, etc.

Data Entry and Analysis

Data was entered into a decentralized Microsoft Access database and Access reports produced in each provincial surveillance government unit. These Access reports were then used by the provincial surveillance unit to create this report and the corresponding Dari report. The findings were analysed and have been presented in three categories in order to facilitate the use of this information to inform policies and programs: Food Security, Risk to Lives and Livelihood Security.

NOTE: These reports were compiled and analyzed as part of a multi-faceted, multi-agency pilot project, and all data and analysis should be checked against final compiled results, and additional information found in a separate document to be produced by the NSS government partners: <http://www.mrrd.gov.af/vau/>. Contact: amanullah.assil@mrrd.org.

Zai could sell some livestock products in the local market, while in Balto Khail, the products from their cow were exclusively used for their own consumption.

LIVESTOCK DISEASES

Foot and mouth disease seems to be a major concern for the three villages. In Balto Khail and in Ghulback, it was reported that 100% of the cattle and oxens were affected by Foot and Mouth while Khalo Zai mentioned the same proportion for their sheep and goats. It is highly unlikely that 100% of these animals suffered from foot and mouth, but is likely that foot and mouth is a serious problem for both their large and small ruminants.

Even though foot and mouth is rarely a deadly disease, it has a tremendous contagious power and affect the vitality of the contaminated animals. This disease has therefore not a direct impact on decapitalisation but given the impact it has on productivity, it should be considered as a strong hindering factor towards better agricultural production and self-sufficiency.

Livestock owners in Parwan area have not had their animals vaccinated and thus their livestock are at risk of suffering from disease outbreak. Veterinary services are available in Charikar but it was reported that the cost of vaccination was too high to be afforded.

In general, people from both villages mentioned that livestock's number has remained the same as last year. Therefore, even though livestock's are probably affected to a certain extent by foot and mouth, this disease didn't have an impact on livestock's decapitalisation.

FOOD ACCESS

FOOD MARKET PRICES

Market access is not a problem for villages. The time taken to reach the nearest markets are 1 hour by foot for Ghulback and Khalo Zai population and 30 minutes for Balto Khail population. Generally speaking, Khalo Zai has a better access not only in terms of distance but also in terms of prices. Since the market used by Khalo Zai households is the big market of Charikar, they can benefit from cheaper prices.

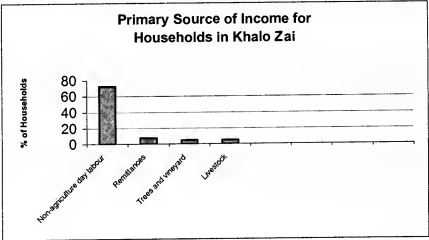
Since the datas below have not been collected prior to the interview period, these have more an indicative and anticipative purpose than an explanatory capability.

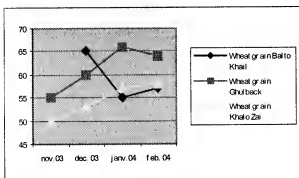
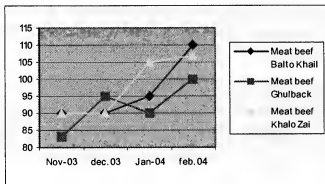
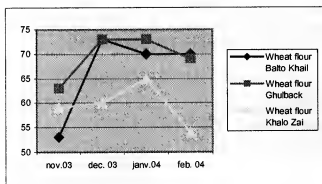
Households interviewed mainly purchase wheat grains, wheat flour from the market, and when affordable, some families will purchase meat.

In Ghulback and Khalo Zai, the prices of wheat flour and wheat grain followed an increased trend from November to January before decreasing in February whereas in Balto Khail, the same pattern could be find for wheat flour. However, in this last sentinel site, wheat grain price decreased strongly from December to January.

Given the fact that Ghulback and Balto Khail households were able to keep some seers of wheat, it presumable that they were encouraged to sell wheat grains and flour on the market and thus could benefit from wheat prices increase. However, the more the wheat has been sold in the market, the less households could keep wheat for their own consumption. The next round of data collection will therefore try to understand to which extent did the advantage of selling wheat in the market have an impact on wheat stocks. It might be interesting as well to see how increase of prices did affect wheat access for Khalo Zai population.

As regard meat prices, they did significantly increase in the three markets from December to February, ranging in February from 100 Afs to 110 Afs for 1 kg of beef, and reducing therefore the access to this rich protein intake food item. Here again, the next round of data collection, together with the markets datas collected since March 2004, will try to understand the impact of these prices on the degree of meat access.



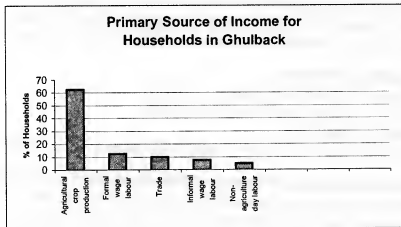
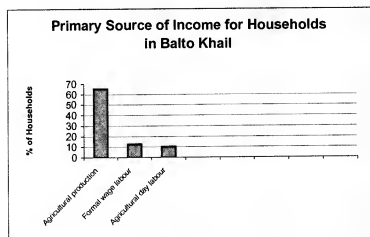


SOURCES OF INCOME

For Balto Khail and Ghulback villages, the primary income source is constituted by agricultural crop production even though this production was quite low. 65% of the interviewed households in Balto Khail and 62,5% in Ghulback are relying on this income source. Beside that, 12% of both villages' population get their main income sources from formal wage labour. In Ghulback, such labours are constituted by enrolment in the governmental army.

As said below, Ghulback could benefit from wheat selling prices increase, while Balto Khail did benefit from an increase of wheat flour. This could indicate that agricultural crop production remained a major income source for both villages after the interview period.

As for Khalo Zai, the primary income source is constituted by non-agriculture daily labour. The persons involved in such labours were mainly working in the construction field or as shopkeepers in the markets. The proximity of Kabul, which is one hour far away by car, can be considered as a major advantage for these people. It was reported that the salary for unskilled persons ranged from 100 to 150 Afs per day while skilled persons could earn an average of 250 Afs per day of work.



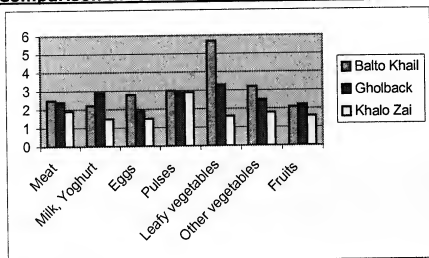
FOOD INTAKE

The food intake of the surveyed sentinel sites is based on wheat and bread. The table below reflects the average frequency of consumption for food groups during the last four months (excluding Ramadan and festivals times) by wealth group and for all households combined, with the exception of wheat and bread which is supposed being eaten on a daily basis. The data shows that on average households are only eating protein rich foods, such as meat, milk-related products, eggs and pulses once to twice a month. Because this data does not reveal information on sufficiency of protein intake, it is hard to assess whether there is inadequate protein intake. It can be noted, however, that households do need a complementary protein source in addition to wheat

in order to meet their full essential amino acid requirements. It is highly unlikely, based on the frequency of consumption of complementary sources (pulses or barley) or sources which are complete proteins (meat and milk-related products) that households are eating enough to be meeting adequate protein requirements.

Village	Meat	Milk, Yoghurt Krut, etc	Eggs	Pulses	Green Leafy Vegetables	Other vegetables	Fruits	1 = Never Eat 2 = Once a month or less 3 = 2 to 3 times a month 4 = Once weekly 5 = Twice weekly 6 = 3 to 5 times weekly
Balto Khail	2.5	2.2	2.8	3.0	5.7	3.2	2.1	
Gholback	2.4	2.9	1.9	2.9	3.3	2.5	2.2	
Khalo Zai	1.9	1.5	1.5	2.9	1.6	1.8	1.6	

Comparison in food intake between villages



RISK TO LIVES

The data below shows the nutritional status of the surveyed population in the 3 sentinel sites:

RISKS TO LIVES INDICATORS	Balto Khail	Gholback	Khalo Zai
Mortality Indicators			
Crude mortality in last 4 months (Deaths / 10 000 / day)	1.17	1.14	.95
Under 5 mortality in last 4 months (Deaths / 10 000 / day)	4.35	2.97	2.35
Births in last 4 months attended by a Skilled Birth Attendant	0	0	0
Morbidity Indicators			
Children < 5 years with watery diarrhoea	70.3	60.6	59.5
Children < 5 years with bloody diarrhoea	8.1	15.2	10.8
Children < 5 with ARI	48.6	33.3	32.4
Children between 6 and 59 months with measles vaccination	83.8	78.8	67.6
Child Anthropometric Status (WFH % of median and MUAC)			
Children with global acute malnutrition (Oedema/Severe/Moderate)	13.5	6.1	0
Children between 6 months and 59 months with Oedema	10.8	0	0
Children between 6 and 59 months with severe acute malnutrition	5.4	0	0
Children between 6 and 59 months with moderate acute malnutrition	8.1	6.1	0
Children between 1 year and 59 months with a MUAC under 13.5 cm	13.5	0	0
Children between 1 year and 59 months with a MUAC under 12 cm	8.1	0	0
Adult Women Anthropometric Status			
Reproductive age women (15-49 years) with a MUAC < 23.0 cm	12.7	12	23.6
Reproductive age women (15-49 years) with a MUAC < 21.0 cm	0	2	5.5
Micronutrient Deficiencies			
Households with iodised salt (only includes households with salt)	2.5	10	10

Given the relatively good dietary diversity of households in Balto Khail, the alarming levels of severe malnutrition in this sentinel site compared to the two other villages could be explained by a lack of drinking quality water access. Moreover, health services access is problematic in Balto Khail since people have to walk 2 hours in order to reach a malnutrition centre in Charikar. Road access is very poor, hindering furthermore the possibility to use a car, especially in winter time.

Strangely, even though vulnerability indicators of Khalo Zai population are generally higher than in the two other villages, the children of this village do not suffer from malnutrition. No simple explanation can be given but a few hypothesis can be put forward that should be confirmed or infirmed in another assessment:

- a cultural factor such as child care practices within the Pashto population could constitute a explanatory factor. This hypothesis is linked to the fact that a nearby village such as Balto Khail, populated by Tadjiks, has a very high level of malnutrition even though it doesn't have significantly worse vulnerability indicators.

- another hypothesis would rely on food habits or feeding patterns used by these Pashtou families. It has been said by the surveyors that the mothers feed their children before themselves. Since most of the children do not use anymore breastfeeding, and since the availability of food is reduced, the mothers could be the last category of persons to have access to food, and given the reduced access to it, the category mostly affected by the food shortage. This would mean in turn that the children would be the next category of people affected by shortage of food.

- another possible explanation is related to the fact that the population has been able to cover their food needs by using the cash and selling the assets they could bring with them when coming back to the village. It seems clear enough, when looking at the basic structure of the village, that this population was quite rich once upon a time. However, since they came back, they had to invest in rebuilding their houses and in buying food items because they couldn't rely anymore on agricultural production. There was a great concern amongst the population for the near future because it was said that this amount of cash has been almost entirely used. If this is indeed the case, we could consider the current nutritional situation as situated on a breaking point.

- a final hypothesis is linked with the interviews' period that took place right after ramadan period. Since this time of year is characterised by a better access to protein rich food such as meat and since children under 14 years old do not have to follow the rules of Ramadan, it could well be the case that the nutritional situation of the children have improved during this specific period. In this case, the malnutrition rate mentionned above should be considered as being biaised. By comparison, Balto Khail, the village located nearby Khalo Zai, has been surveyed at the very beginning of Ramadan period, and this could be a factor explaining the huge malnutrition gap between the two villages.

This last hypothesis is somehow confirmed by the datas collected on admissions in the SFC and TFC in Parwan and Kapisa provinces from November 2003 to February 2004. These datas show that there has been an increase in admission of 56% in SFC and 61,5% in admissions in TFC between November and December. This would mean that the malnutrition rate datas we collected may not reflect the nutritional status of the population during a normal period. However, there is a need to say that this gap in admissions between November and December may not only be explained by the special food intake during Ramadan period but also by the fact that people do use less transportation during this period.

	November 2003	December 2003	January 2004	February 2004
Global admission SFC	672	1051	891	716
Global admission TFC	13	21	20	19

Only 2,5% to 10% of the households had iodized salt. This is particularly worrying, given that iodine deficiency in women of childbearing age is of grave concern due to the effects on the developing foetus. Children of iodine-deficient mothers may be born with varying degrees of cretinism and development problems, both physical and mental. A nutritional survey done by ACF in March-April 2003 in Parwan and Kapisa provinces found alarming rates of goitres among the population. 64.7% of mothers were found to have a visible goitre, resulting from iodine deficiency, while 78.2% of the families had one or more visible goitre case in the family.

As regard access to health facilities, Ghulback is 20 minutes far away by foot from a SFC and about 1 hour far away from a hospital. Khalo Zai can benefit from various health facilities found in Charikar. The poorest sentinel in terms of health services is clearly Balto Khail which stands at about 2 hours by foot from Charikar.

COPING STRATEGIES

Between 22.5% and 50% of the households were concerned by the migration of at least one of their members in order to find job opportunities. The most common migration destinations were Kabul, Pakistan and Iran. Between 82,5 % and 97,5% of the households did borrow food from their relatives in order to make a meal. This indicates a strong solidarity pattern amongst the village which is corroborated by the fact that these populations are used to practice zaqat, but in the same time it indicates regular and worrying lack of access to food. The amount of persons who took food on credit corroborates this last statement, especially in Khalo Zai and to a lesser extent in Ghulback. Even though Balto Khail population did not take food on credit, 47,5% of the population did take out a loan, increasing their indebtedness and creating therefore further constraints on their immediate future.

	Balto Khail	Ghulback	Khalo Zai
Non-Erosive Coping Strategies (last four months)			
Household member migrated for labour	22.5	25	50
Begging	0	0	0
Sons sent to work as indentured labour	7.5	17.5	32.5
Household members worked more hours to make daily expenses	40	12.5	47.5
Households who borrowed food from relatives in order to make a meal	82.5	90	97.5
Sold Carpet / Gilims from the house	7.5	5	10
Sold house furniture	0	0	0
Sold house part (windows, doors, roofbeams)	7.5	5	5
Sold bicycle	17.5	0	0
Sold jewelry	0	0	0
Sold motorcycle / car	0	0	0
Consumption of dried bread	2.5	0	2.5
Erosive Coping Strategies			
Household took out loan	47.5	27.5	35
Household sold or mortgaged land, house or shop	0	0	0
Households who took food on credit from local shop	0	30	67.5
Sold sewing machine	15	2.5	2.5
Sold loom	2.5	0	0

The main things revealed by the November 2003 data collection are the following ones:

- Access to water, be it for irrigation or for drinking purposes, is a problematic issue in Balto Khail and in Khalo Zai.
- The amount of wheat harvested will probably not be able to cover the villages needs until next harvest
- Even though we cannot mention any decapitalisation of livestock, foot and mouth disease seems to be endemic in the area, thus hindering the agricultural production
- An agricultural disease called "chalchala" is a major concern for all the villages visited
- Non agricultural job opportunities are good given the proximity of Kabul
- Agricultural day labour is not a common income source because they are very few rich families who can afford to pay workers
- Iodine deficiency is a great concern since goiter is a widespread problem along Parwan province



Parwan
Surveillance
Unit

National Surveillance System (NSS)

Transitional Islamic State of Afghanistan

Ministry of Rural Rehabilitation & Development, Ministry of
Agriculture & Animal Husbandry & Ministry of Health

Parwan
Province

BALTO KHAIL

Fall 2003

What is the NSS?

The National Surveillance System monitors trends in key indicators in order to predict early signs of change and deterioration in livelihoods, food security and nutrition. In conjunction with other complementary data collection systems, the NSS provides relevant data for prioritizing limited resources and designing programs. The NSS aims to cover all 32 provinces, but currently during its pilot phase is active in seven provinces.

Methodology

The NSS is based on a sentinel site system, in which provincial level ministries follow a rotating cohort of households overtime. Sites are selected so that they mirror the majority of the villages (rural areas) or other blocks / communities neighborhoods (urban and semi-urban areas) with respect to agro-ecological features, economic activities, available services, infrastructures and people in a given area.

Because of the diversity of livelihoods in Afghanistan, even in rural areas, information from the sentinel sites should be interpreted as only to represent each particular sentinel site. However, it is likely, that the data from one sentinel site can signal concern for other villages. In the same agro-ecological zone or similar blocks in an urban setting.

Analytical Framework

The data is organized into three categories for analysis and discussion, in order to use the information to inform policies and programs.

- Livelihood Security
- Food Security
- Risk to Lives

A description of each category is listed on the last page of the bulletin.

PARWAN PROVINCE

Parwan Province is a rural province mainly located in the Shamali Plain, North of Kabul. This plain which is a little undulating lies at around 2000 meters high and is surrounded by mountains. There are two main rivers irrigating the Province, Panjshaar river and Ghorban river. A complex irrigation system has been built that should allow the whole Province to cultivate mainly irrigated wheat. Charikar is the official Province center. This region has been heavily affected by the war between the Talebans and the Tadjiks, being at the frontline of the various battles.

AGRO-ECOLOGICAL ZONES

It has been decided to divide Parwan Province in three different agro-ecological zones

Zone 1: Irrigated Land with heavy water access - location in plain: Balto Khail

Zone one encompasses villages which are located East of Charikar. These villages have enormous amount of water due to the fact that they are situated on the lower side of Shamali plain and are irrigated by both the Panjshaar river and the Ghorband river. Their main income sources are constituted by agricultural production. Balto Khail, the sentinel site that has been chosen, is located 12km away from Charikar, on its Eastern side. The village is found in the vicinity of Panjshaar and Ghorband rivers junction. Due to its location on a hillside, the lower part of the village is characterised by intensively irrigated lands while the upper part has to face problems regarding access to water. There are 220 households living in the village which are Tadjiks and speak Dari. The average number of persons living in each household is 6,4.

Zone 2: Irrigated Land with poor access to water - location in plain: Khalo Zai

Zone two covers the Western part of the Shamali plain (West from Charikar). This zone faces problems of water access which are caused by their location in the upper side of the plain. Non agricultural daily labour in the nearby cities is the main source of income for these populations. Khalo Zai is located 13 km on the South-Western side of Charikar, 3 km away from the main road Kaboul-Mazar-e-Sharif. The people from Khalo Zai are in their vast majority Pashto and speak Pashto. During the Talebans period, this village was located south of the former frontline, on Talibans side, whereas the neighbouring villages were located on the other side of the frontline, on Tadjik side. The village has been almost completely destroyed during the fighting period and the local population had to leave their village. Moreover, the region suffered from drought until last year. During 2002, the population came back in the village and since then, returnees are regularly coming back in their native village. It is a big village that can be separated in three different manteqas. Khalo Zai is the most populated village chosen in Parwan province with 850 households. The average number of persons living in each household is 7.

Zone 3: Irrigated Land - location in valleys: Gholback

Zone three covers the northern section of Parwan Province, a zone that lies in the Panjshaar's valleys. These villages are situated in sharp valleys and are irrigated by a river passing in the bottom of the valley. Their main income sources are constituted by agricultural production. Gholback is located in one of Panjshaar valleys, approximately 65 km North of Charikar and 25 km from Gulbahar. It is a village which lies on the two sides of a sharp valley with a river passing at the bottom of this valley. The upper side of the village is covered by houses while the lower side, near the river, is dedicated to agricultural lands. Due to their situation in stairs, the surface of each cultivated parcel is rather small, amounting on average to 1,8 Jerib. Many villages in the Panjshaar valleys do share the same basic characteristics as Gholback. They are 200 households living in Gholback which speak mainly dari and are of Tadjik origins. The average number of persons living in each household is 7,1.

Information for this report was collected in one survey that took place in november 2003. This survey is based on the standardized national food security and nutrition surveillance questionnaires. These questionnaires were targeted at both male and female focus groups as well at males and females households.



National Surveillance System (NSS)
Transitional Islamic State of Afghanistan

Round One Surveillance Reports
Parwan Province Sentinel Sites
(data collection: Fall 2003)

prepared by

Action contre la Faim (ACF)
Food Security and Nutritional
Surveillance Team

in partnership with

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Government of the United Kingdom

November 27, 2004



Parwan Province Reports

Overview – Synthesis	Tab 1
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Sayyed Abad District Sentinel Sites

• Balto Khail – Livelihood Zone 1	Tab 2
• Khalo Zai – Livelihood Zone 2	Tab 3
• Gholback – Livelihood Zone 3	Tab 4

NSS Methodology	Tab 5
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